

(A Simmons-Boardman Publication)

# AMERICAN BUILDER

and Building Age

NAME REGISTERED U. S. PATENT OFFICE AND CANADIAN REGISTRAR OF TRADE MARK

JANUARY, 1939

61st Year

Vol. 61, No. 1



AMERICAN BUILDER and BUILDING AGE, with which are incorporated National Builder, Permanent Builder and the Builder's Journal, is published on the first day of each month by the

SIMMONS-BOARDMAN PUBLISHING CORPORATION

105 West Adams Street  
Chicago, Ill.

NEW YORK  
30 Church Street

WASHINGTON, D. C.  
National Press Building

SEATTLE  
1038 Henry Building

SAN FRANCISCO  
485 California St.

LOS ANGELES  
530 West 6th St.



Samuel O. Dunn, Chairman of Board; Henry Lee, President; Bernard L. Johnson, Robert H. Morris, and Delbert W. Smith, Vice-President; J. S. Crane, Eastern Manager; Roy V. Wright, Secretary; Elmer T. Howson, Assistant Secretary; John T. De Mott, Treasurer.

Subscription price in the United States and Possessions and Canada, 1 year, \$2.00, 2 years, \$3.00, 3 years, \$4.00; foreign countries, 1 year, \$4.00, 2 years, \$7.00, 3 years, \$10.00. Single copies 25 cents each. Address H. E. McCandless, Circulation Manager, 30 Church Street, New York, N.Y.

Member of the Associated Business Papers (A. B. P.) and of the Audit Bureau of Circulation (A. B. C.)

Publisher's Page—Business Will "Carry On"—If Allowed To —by Samuel O. Dunn.....	23
Editorial .....	25
Homes the People Desire .....	
1939 Building Outlook and Review of 1938.....	26
"Best Year Since 1929" Forecast for Home Builders; Outlook Bright As Statistical Studies Indicate 30 to 40% Increase in New Homes; Totals May Pass 1929; Small Speculative Homes on Increase; Non-Farm Homes Built in 1938 Estimated at 345,000.	
A Double Portfolio of Homes for 1939.....	31-58
A Collection of 22 Designs Featuring Practical, Saleable Homes of the Type Which Will Be Popular in the 1939 Market. Covering a wide range of size, style and location, this selection includes the following: Rambling Colonial in Rural Connecticut Michigan Exhibit Home Styled for Modern Living Interiors and Details of Nurmi Exhibit Home Attractive Real Estate Office Inspires the Building of Small Homes Hartford Home with Breezeway "Picture Home" 5 Rooms and Bath; Attached Garage Stone and Old Brick in Virginia Home A Gem from the Old South Graceful Interiors Broadway Model Home in Los Angeles 6-Room Dutch Colonial, 25x27 Ft., Attached Garage Monterey Style at Blue Ridge, Wash. 6-Room Attractively Styled Brick Front Colonial Two 6-Room Colonial Homes in Evanston, Ill. Concrete Walls, Floors Planned and Built for Comfort Living Corner Lot Colonial from the Midwest 4 Bedrooms, Good Plan Modern Chicago Home Features Excellent Design 7-Room "Orchard House" Bears Mississippi Honors 5-Level House in Illinois Contains 8 Rooms, 1½ Baths Light and Air Abounds in These Kansas Apartments	
Index to 1938 Home Designs and Plans.....	59
Annual Index to Designs Published in American Builder During the Past Year	
TruCost Figures for American Builder Home Designs.....	60, 61
Architectural Detail Plate Series.....	62
Second in This Series Presents Plywood Treatment of Basement Recreation Room and Attic Space	
Only 16 Years Old—\$2,000,000 Apartment Building Is Remodeled.....	64
Shopcrafter's Corner.....	66
Practical Job Pointers.....	68
New Year Brings Better Building Materials.....	70
News of the Month.....	78
Book Reviews.....	84
Letters from Readers.....	86
Catalogs Reviewed.....	94
Advertisers' Index.....	97

BERNARD L. JOHNSON  
Editor

JOSEPH B. MASON  
Eastern Editor

R. E. SANGSTER  
Managing Editor

DOLA PARR  
Associate Editor

ROBERT H. MORRIS  
Business Manager

LYMAN M. FORBES  
Research Editor

L. E. ARENT  
Art Editor

A. W. HOLT  
"TruCost" Editor

ADVERTISING: W. F. COLEMAN, L. B. CONAWAY, J. S. CRANE, J. C. JONES,  
J. R. PARROTT, E. J. REICH, D. W. SMITH, C. J. WAGEMAN

FIELD STAFF: L. C. ANDERSON, V. L. ANDERSON, C. L. CONLEY,  
C. R. W. EDGCUMBE, J. H. FREE, CHARLES R. HARTUNG, A. W. HOLT

# IMPORTANT BUILDING PRODUCT NEWS

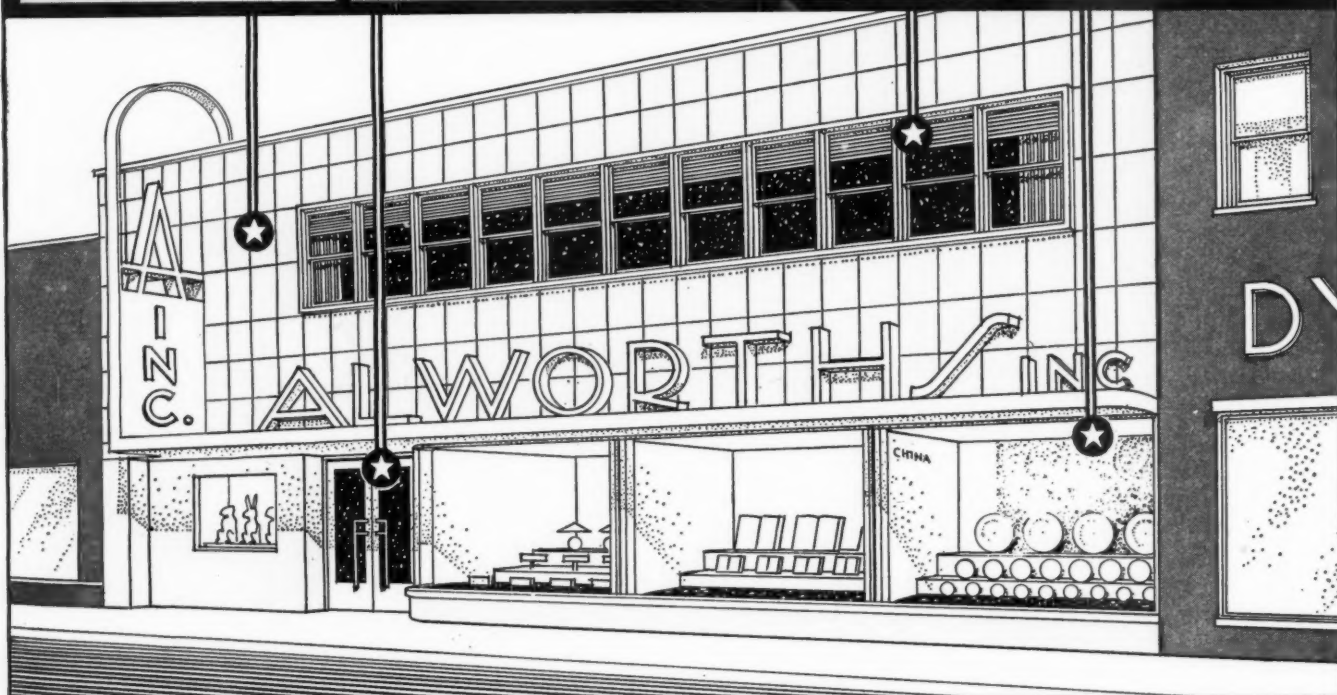
## -for every architect and builder in America!

**PORCELAIN ENAMEL FACING PANELS**—wide range of permanent colors—safe at any height—individually suspended.

**BRONZE OR ALUMINUM DOORS AND ENTRANCES**—rich in lasting beauty—sturdy—durable—low upkeep cost—no painting.

**SEALAIR ALL-ALUMINUM WINDOWS**—putty or metal glazed—for all types of buildings and homes—opening sizes to 5' x 9'.

**STORE FRONT CONSTRUCTION**—complete, harmoniously designed line—fully resilient sash, bars, rolled or extruded.



Kawneer—pioneer in the field of Rustless Metal Building Products—offers the most advanced types of Store Fronts, Windows and Doors on the market today. Years of experience and development in design, fabrication and finishes bring notable improvements which may well affect your specifications for 1939.

**ARCHITECTURAL PORCELAIN ENAMEL FACING PANELS**—permanent, attractive and colorful, for all types of store fronts and buildings. 27 standard satin finish colors. Durable—light in weight—safe at any height. Individually suspended and easily installed. Adaptable—

formed in any desired shape, allowing great freedom for the designer.

**KAWNEER RUSTLESS METAL DOORS AND ENTRANCES** are made for store fronts, residences and buildings of all types. Furnished in aluminum, bronze, or other durable non-ferrous metals—with sturdy, precisely built doors in both welded-tubular and flush type construction. Rich in beauty, they require practically no maintenance.

**SEALAIR ALL-ALUMINUM WINDOWS—SERIES 120 AND 220**—meet all requirements for schools, apartments, residences, hospitals, hotels, commercial, public and monumental buildings. Types for Colonial, English, Modern or any architectural

style—double-hung or casement. Complete factory-fitted, factory-assembled units—in standard sizes for openings up to 5'0" x 9'0". Putty or metal glazed. Never require painting—cannot rust, rot or swell. Upkeep costs are practically eliminated. The outstanding window value today.

**KAWNEER STORE FRONT CONSTRUCTION** is up-to-date and attractive. Fully resilient sash and bars reduce possibility of plate glass breakage to a minimum. Resilient extruded or rolled construction in aluminum or bronze. The Kawneer line also includes latest types of awning bars, and metal work for the entire front.

Information on any Kawneer product will be sent on request. Write today for details.

# Kawneer

THE KAWNEER COMPANY, NILES, MICHIGAN. BRANCHES: NEW YORK, CHICAGO, BERKELEY, CAL. DISTRIBUTORS IN PRINCIPAL CITIES.

1939 JAN 15

# PUBLISHER'S PAGE

## Business Will "Carry On"—If Allowed To

**T**HE improvement in general business that began last May has continued. In May, 1937, the total volume of all business had recovered to about 90 per cent of the pre-depression volume. In May, 1938, it had declined to about 62 per cent of it—the greatest decline that ever occurred in a year. In December, 1938, it had again recovered to 77 per cent. This was an increase over May, 1938, when the bottom of the "recession" was reached, of 25 per cent. But it left business only as large as in May, 1936, and 23 percent smaller than in the five years ending with 1929—although the country's population has increased ten million, or about 8 per cent, since then.

The improvement that occurred in the last seven and a half months of 1938 began and continued some weeks before the government's new spending campaign commenced. Therefore, it was not started by government spending. Perhaps government spending has contributed to it, but nobody knows how much.

Some things are certain, however. Previous government spending never caused full recovery—because full recovery never occurred—although government spending to cause it was unprecedentedly huge. And all this government spending did not prevent the "recession"—because the "recession" did occur and was the sharpest ever known. And government spending cannot much longer be maintained without a large increase in taxes that would make receipts from them equal government expenditures—because a continuance of such great deficits as those of recent years would soon bankrupt the government.

Therefore, unless taxes are soon to be greatly increased, government spending must soon be greatly reduced. But who is to provide employment and support for those now depending on government spending? Private business, of course—if anybody.

But can private business do it?

**I**T is very significant that never until recently did any intelligent person seriously raise the question as to whether private business could provide employment and a living for this country's entire population. It is raised now because for some years private business apparently has been unable to provide enough employment. But has it actually been unable to? Nobody knows—because for over five years private business has been prevented from showing what it can do by unprecedented government spending and taxing, and by numerous other government policies that have prevented the normal, efficient and progressive operation of private business.

How, then, make it possible for private business to take over the load of employment and relief now being borne by government spending?

*First, reduce every form of government spending, whether local, state or federal.*

*Second, reduce every form of government competition with private business, direct or indirect—including government subsidizing (with the taxpayer's money) of some kinds of private business competing with other kinds of business.*

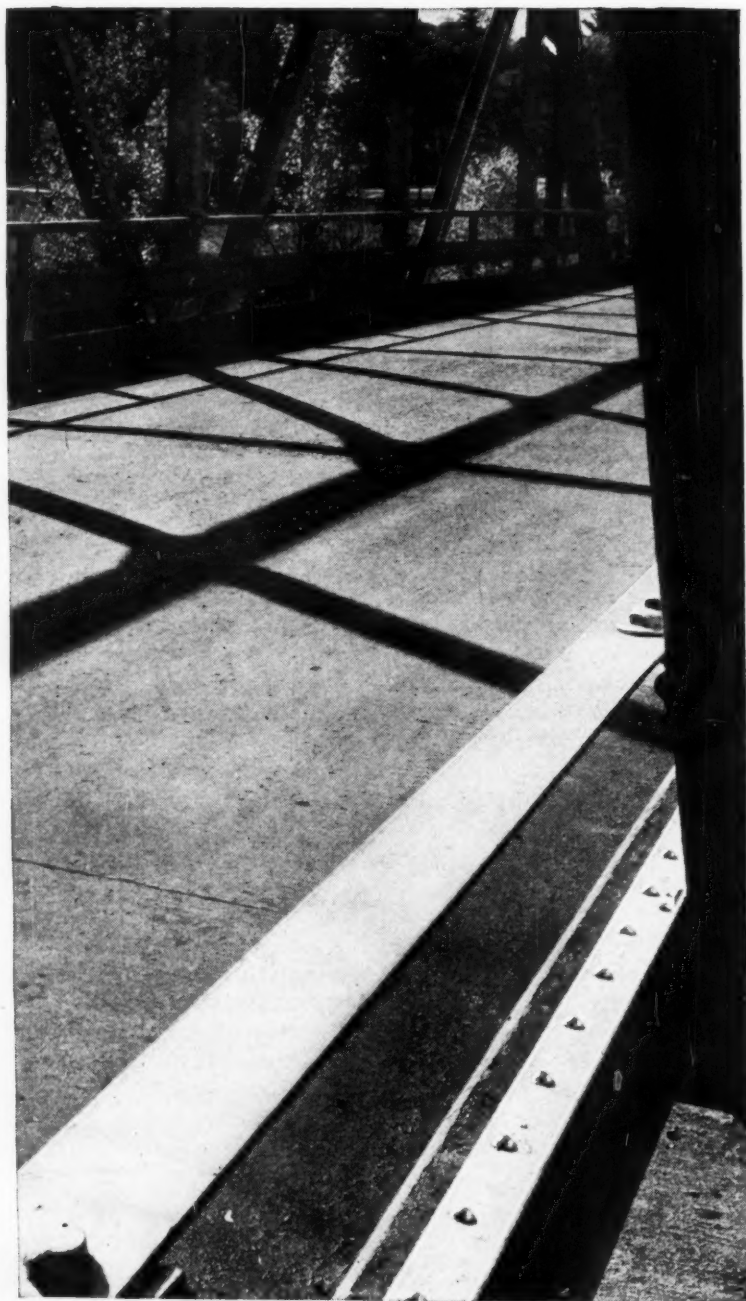
*Third, reduce all government regulation of naturally competitive industries excepting regulation to enforce publicity, honesty and competition in the conduct of their business.*

**E**VERY such reduction of government spending and interference, tending toward reestablishment of the true American system of free private enterprise, will stimulate production and commerce, and thus help private business to provide full employment and a better and better living for the American people.

*Samuel O. Dunn*



# CONCRETED AT SUB-ZERO JUST 10 YEARS AGO



**'INCOR' CUT  
HEAT-PROTECTION  
COSTS 80%**

---

**CONDITION TODAY,  
"GOOD AS NEW"**

---

**R**ECALLS to mind the old saying about the "proof of the pudding," this bridge job (left) at Middlesex, Vermont.

Temperatures fell below zero, when 'Incor' concrete was placed, in mid-Winter 1928-29, just TEN YEARS AGO. Recent examination shows all concrete in first-class condition.

Yes, 'Incor' cut heat-protection costs 80%; but, above all, it produced strong, dense, long-lasting concrete. Sound reasons, these, for using 'Incor' 24-Hour Cement on work now under way.

Write for copy of "Cold-Weather Concreting;" tells how to figure 'Incor'\* savings. Lone Star Cement Corporation, Room 2229, 342 Madison Avenue, New York.

\*Reg. U. S. Pat. Off.

## LONE STAR CEMENT CORPORATION

MAKERS OF LONE STAR CEMENT... 'INCOR' 24-HOUR CEMENT



# AMERICAN BUILDER

## AND BUILDING AGE

### Homes the People Desire

**T**HE building industry has a great advantage in selling its goods and services. Homes are *both needed and desired*. Shelter, one of the three prime necessities for human existence in the North American climate, is also one of the basic sentimental urges of the human heart. To possess and occupy a home is a dominant motive with almost everyone.

As the nation's population grows and as it shifts from country to town, as new marriages and new families are formed, as old houses become dilapidated and are torn down, as styles and modes of life change and new types of houses in new locations are called for, a great "potential" of home building demand is created. Statistical experts agree that today this piled up need for new homes is the greatest in history. It is estimated at from two million to four million family units—enough to keep the building industry operating at top speed and volume for a number of years.

And on top of this stark need for shelter or "housing" there is also this deep and fundamental urge to home ownership which drives both young men and families on to buy or build, making the biggest and most important financial commitment of their lives, in the majority of cases.

#### A Boundless Market

And so the business men of the great home building industry have the benefit of these two prime market facts, an unlimited potential of building need and a strong human urge toward satisfying that need. The people want homes—good homes, small homes, low-cost homes. They have quite definite ideas about the type and style of home they want. They have, most of them, been building up in their mind's eye—or in a scrap book—the composite picture of what that new home is to look like and what it is to contain. When they get around to invest their savings *that* is what they want.

Now these facts have a lot of meaning to those builders who are building homes for sale and for all others in the industry who are concerned with promoting home building or with increasing the volume of sales of home building materials and equipment. Sound promotion and sales work obviously should be in line with what the people want and can pay for.

Recently a good many of the business men concerned with home building have been startled and nonplussed by the advent on the home building scene of certain home designs, aggressively promoted, that are so strange and

radical in appearance as to upset all accepted ideas of what an American home should look like. On this page this publication in the last two issues has warned against the use of anything of such a sensational and upsetting nature if confidence in home building and home ownership is to be strengthened among the people.

Evidently we are not standing alone on this; the editor's mail shows it to be a live subject with building industry leaders.

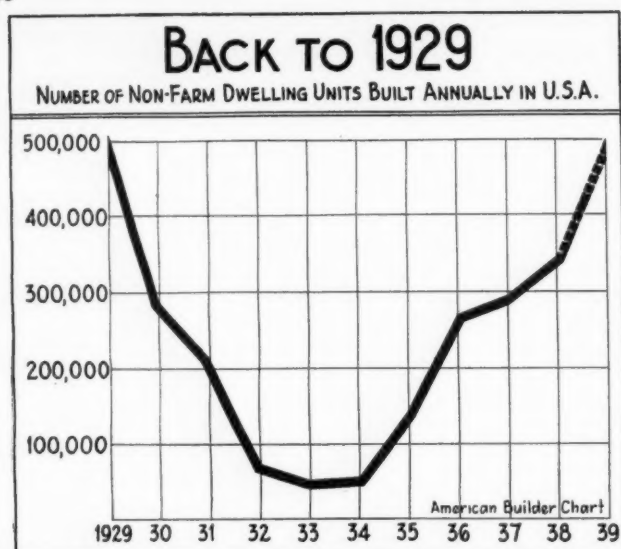
#### Table Cloth Home Planning

Phil Runion, secretary of the Nebraska Lumber Merchants' Association, in casting his vote for the people's ticket in home designs, has this to add:

"I think that in a great many instances the architect and builder have gone to the extreme in some of their designs. Practically every community, in which a number of homes have been erected in the past year or two, has one or two monstrosities which are no credit to home ownership. They are fantastic, to say the least. I recently had the opportunity to see one of the so-called streamlined homes which had the appearance of being designed on a tablecloth in a night club about four o'clock in the morning. I can't imagine anyone ever wanting to own such a place."

An interesting slant on this subject of extremes in home design has also been contributed by W. E. Difford, managing director of the Douglas Fir Plywood Association. He recalls that during the last building boom in the 20's, every kind of a house under the sun was built. Many of them were atrocities. When the depression hit the country, every loan institution became a big real estate owner, due to the tremendous volume of foreclosures. If anyone watched the sales of this distressed property at the Court House doors of the country, he could not help but have one object lesson—that the house of conventional design was sold quickly and at a fair price while the abortive architecture was a drug on the market; no one wanted them at any price.

The summary of home building figures for 1938 and the forecast for 1939 presented in this issue clearly show that the big present-day market is for the low-cost to medium-cost home. That's where the volume is and that's where the sales promotion should be. It doesn't help to picture \$10,000 houses and blithely state that the cost is half that, as many publications have been doing. Logical prospects are misled and deterred by such tactics. And it doesn't help to picture and praise extremes of modernistic design, at the same time belittling conventional architecture. Give the people what they want and can afford and the home building industry will prosper greatly in 1939.



NO. I—AFTER 10 LONG YEARS, the total number of new non-farm homes in the U.S. is beginning to approach 1929 levels. Approximately 500,000 units are forecast for 1939.

THE men of the building industry are faced with the best prospects for a prosperous year in almost a decade. Residential construction in particular is predicted by practically all analysts of the field to be in a strong position, with the very real possibility that the total number of homes built will approach or may possibly exceed 1929 levels.

The prospects for 1939 have been concisely summarized by Standard Statistics Company with the phrase, "The impressive level of current contract awards sug-

## "Best Year Since

**Outlook for 1939 Bright as Statistical Studies Indicate 30 to 40% Increase in New Homes. Totals May Pass 1929. Small Speculative Homes on Increase. Non-Farm Homes Built in 1938 Estimated at 345,000**

gests that 1939 will in fact see greater building activity than any of the last ten years." *American Builder*, after comparing its findings with the trustworthy analytical and statistical organizations in this field, concludes that 1939 will prove to be the best building year since 1929, and as far as the number of new residential units is concerned, may exceed 1929.

Here is what the man says who *American Builder* believes is the foremost authority on construction data in the U. S.—Herman B. Byer, chief of the Construction Division of the Bureau of Labor Statistics. Mr. Byer's tabulators gather building permit data from more than 2,100 towns and cities; he is the man who originated and set up this efficient service and, through the medium of special local surveys, is in close touch with construction activities. He says: "We are a reporting, not a forecasting agency, but on the basis of the sharp increase in

### New Homes Built in U. S. in 1937 and 1938

Urban Estimates by Construction Division, U.S. Bureau of Labor Statistics, Based on Building Permits in More than 2,100 Cities with Population of 60,500,000

Where Built	No. of Cities and Places	Population (1930 Census)	Number of New Dwelling Units Provided in—							
			All types		1-family		2-family		Multifamily	
			1938	1937	1938	1937	1938	1937	1938	1937
1. Cities 500,000 and over	14	21,315,411	84,237	69,748	35,436	28,844	3,450	3,631	45,351	37,273
2. Cities 500,000 to 100,000	79	15,010,325	42,817	33,846	29,911	25,963	3,176	2,979	9,730	4,904
3. Cities 100,000 to 50,000	98	6,491,448	18,552	15,604	13,345	11,784	1,682	1,539	3,525	2,281
4. Cities 50,000 to 25,000	185	6,425,693	19,992	18,226	16,303	15,481	1,186	1,262	2,503	1,483
5. Towns 25,000 to 10,000	606	9,097,200	35,395	33,124	30,783	28,596	1,746	1,846	2,866	2,682
6. Towns 10,000 to 5,000	851	5,897,156	24,755	22,715	21,361	19,147	1,259	1,387	2,135	2,181
7. Villages 5,000 to 2,500	1,332	4,717,590	20,766	18,002	18,419	15,888	1,265	1,211	1,082	903
Total URBAN	3,165	68,954,823	246,514	211,265	165,558	145,703	13,764	13,855	67,192	51,707
8. Incorporated Places of Less than 2,500 Population	13,433	9,183,453	98,500	82,900						
9. Rural Population Not on Farms or in Incorporated Places		14,191,420								
Total NON-FARM		92,329,696	345,014	294,165						
10. Farm Population		30,445,350	**	**						
TOTAL U. S.		122,775,046								

NO. II—A COMPLETE PICTURE OF HOW AND WHERE U. S. homes were built in 1937 and '38. The urban figures (items 1 to 7) are estimates by the U. S. Bureau of Labor Statistics based on building permits in more than 2,100 cities, representing 88% of entire urban population. The non-farm rural figures (items 8 and 9) are *American Builder* estimates after consulting with Federal officials. An important part of this group consists of small "satellite" communities adjoining cities. \*\*Farm home building—no adequate estimates on farm homes are available. At the rate of 1 farm home per 1,000 population (1/3 the per capita rate in the rural sections above) some 30,000 farm homes would have been built.



# 1929" Forecast for Home Builders

building permits in the last half of 1938 and other supporting data, we believe an increase in private residential construction in 1939 of from 30 to 40 percent is entirely possible. In addition, there will be a sizeable volume of public housing, which, in my opinion, will not to any extent affect the volume of private building."

In the last half, and especially in the last quarter, of 1938, residential building permits, contracts and contemplated work, as indicated by FHA mortgages selected for appraisal, showed such unexpectedly large increases that most estimates for both 1938 and '39 had to be revised upward. The Bureau of Labor Statistics, the FHA Department of Economics and Statistics, and the Department of Commerce building analysts are in agreement that the total number of non-farm homes, public and private, built in 1938 was between 325,000 and 350,000 units.

The total value of private non-farm residential construction activity in 1938 is estimated by the Department of Commerce at \$1,285,000,000.

Most striking of the statistical data concerning 1939 is the manner in which the FHA mortgages selected for appraisal continue at extremely high levels. A most significant chart, showing the relation between the number of these mortgages and the number of one and two-family houses reported by the Bureau of Labor Statistics is shown in Chart V. There is a direct relationship between the two graphs, showing that increases or decreases in the number of mortgages selected for appraisal are followed very quickly by increases or decreases in the total number of new homes started. In the later months of 1938 this chart clearly shows mortgages selected for appraisal have been running from 90 to 114 percent ahead of last year, which is one of the best possible indications of a large and early increase in residential construction in 1939.

The surprisingly large increases in residential activity

## 90% of FHA Insured Homes In 1938 Valued Under \$8,000

Data From FHA, Division of Economics and Statistics—  
3 Month Period

Property Valuation (House and Lot)	Percent of Total Number of Homes		Property Valuation (House and Lot)	Cumula- tive Percent of Total Homes	
	1937	1938		1937	1938
TOTAL	100.0%	100.0%	TOTAL		
Less than 2,000	0.3	0.2	Less than \$ 2,000	0.3	0.2
\$ 2,000—\$2,999	4.8	3.5	3,000	5.1	3.7
3,000— 3,999	14.4	14.1	4,000	19.5	17.8
4,000— 4,999	20.1	22.8	5,000	39.6	40.6
5,000— 5,999	19.7	23.1	6,000	59.3	63.7
6,000— 6,999	14.4	17.9	7,000	73.7	81.6
7,000— 7,999	9.4	8.2	8,000	83.1	89.8
8,000— 8,999	5.9	4.0	9,000	89.0	93.8
9,000— 9,999	3.1	2.1	10,000	92.1	95.9
10,000 or More	7.9	4.1	All Groups	100.0	100.0

NO. III—A STRONG TREND toward lower priced homes is indicated in the above chart showing valuation of residential properties by FHA, including house and lot. Approximately 90% of new FHA insured homes in 1938 cost less than \$8,000.

## Where Homes Were Built

Number of Dwelling Units in Total Urban Area, by States,  
1st 9 Months of 1938 and 1937

Geographic division and State	First 9 months of	
	1938	1937
<b>TOTAL U. S. URBAN</b>	<b>197,433</b>	<b>167,417</b>
<b>NEW ENGLAND</b>	<b>7,595</b>	<b>8,284</b>
Connecticut	2,054	2,117
Maine	427	446
Massachusetts	3,795	4,359
New Hampshire	374	331
Rhode Island	805	908
Vermont	140	123
<b>MIDDLE ATLANTIC</b>	<b>69,749</b>	<b>42,291</b>
New Jersey	4,605	4,170
New York	58,430	30,564
Pennsylvania	6,714	7,557
<b>EAST NORTH CENTRAL</b>	<b>22,824</b>	<b>25,461</b>
Illinois	4,448	4,676
Indiana	2,414	2,817
Michigan	7,613	8,370
Ohio	5,879	6,789
Wisconsin	2,470	2,809
<b>WEST NORTH CENTRAL</b>	<b>10,919</b>	<b>9,998</b>
Iowa	1,923	1,446
Kansas	1,360	1,470
Minnesota	3,107	2,603
Missouri	3,153	2,990
Nebraska	742	932
North Dakota	228	198
South Dakota	406	359
<b>SOUTH ATLANTIC</b>	<b>21,988</b>	<b>22,375</b>
Delaware	161	182
District of Columbia	2,790	4,703
Florida	5,719	5,935
Georgia	2,346	2,179
Maryland	2,235	1,740
North Carolina	3,731	3,165
South Carolina	1,135	1,284
Virginia	2,419	1,784
West Virginia	1,452	1,403
<b>EAST SOUTH CENTRAL</b>	<b>6,136</b>	<b>6,700</b>
Alabama	1,651	1,582
Kentucky	1,356	1,415
Mississippi	1,280	1,314
Tennessee	1,849	2,389
<b>WEST SOUTH CENTRAL</b>	<b>19,712</b>	<b>17,051</b>
Arkansas	869	784
Louisiana	2,411	1,923
Oklahoma	2,986	2,899
Texas	13,446	11,445
<b>MOUNTAIN</b>	<b>4,982</b>	<b>5,291</b>
Arizona	525	532
Colorado	1,172	1,388
Idaho	578	642
Montana	494	557
Nevada	244	255
New Mexico	658	667
Utah	928	964
Wyoming	383	286
<b>PACIFIC</b>	<b>33,528</b>	<b>29,966</b>
California	29,682	26,270
Oregon	1,309	1,642
Washington	2,537	2,054

NO. IV—HOW INDIVIDUAL STATES PERFORMED in the home building picture in the first 9 months of 1937 and 1938 is interestingly shown above. These Bureau of Labor Statistics estimates are based on building permits from more than 2,100 cities, representing 88 percent of the U. S. urban population.



in the latter part of 1938 were largely in privately built small homes and apartments. Sixty-three percent consisted of one-family dwellings, 6 percent two-family dwellings, and 31 percent apartment houses. A large part—probably 75 percent—of the apartment house construction was concentrated in the New York City area.

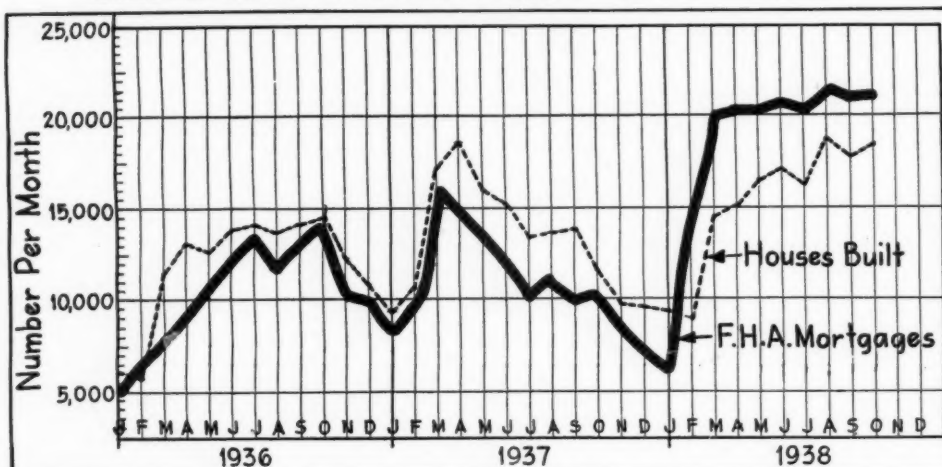
Very little of the public housing program of the USHA got into the construction stage in 1938, but will undoubtedly show up in large totals in 1939. The program of the USHA is advancing rapidly and estimates from a number of competent sources indicate that public housing will proceed under its program in 1939 at about

5,000 units per month, or with the total for the year falling somewhere between 50,000 and 75,000 units. This will be a definite addition to private residential construction, and in the opinion of most observers will have little effect on private operations.

The outlook for private residential construction has improved so rapidly in the past few months that *American Builder* has been forced to revise its preliminary estimates upward. These estimates are so high in relation to past years that they were questioned and then rechecked with great care with the Bureau of Labor Statistics, FHA, Department of Commerce and other qualified

### FHA Mortgages Forecast Sharp Increase

Heavy Line—FHA Mortgages Selected for Appraisal and Fees Paid, By Months  
Dotted Line—Number of 1 & 2 Family Dwellings, Urban Areas of U.S., By Months



NO. V—MORTGAGES selected for appraisal by FHA have proved an excellent advance indicator of home building volume. As the chart at left shows, they have been running more than 100% above 1937 in recent months. Dotted line shows total monthly number of one and two-family dwellings in urban areas of U.S. as estimated by the Bureau of Labor Statistics.

### New Private Construction In U. S.—1920-1938

Data from U. S. Bureau of Foreign & Domestic Commerce  
(Millions of dollars)

Year	Residential (non-farm)	Nonresidential Building							Deduct non-residential building by utilities included in total shown in column 8	Total private non-residential building	Farm construction (includes repairs)	Total private construction
		Commercial	Factory	Religious and memorial	Educational	Social and recreational	Hospital and institutional	Total non-residential				
1920	1,610	657	889	60	24	119	33	1,782	39	1,743	578	3,931
1921	1,760	600	464	77	35	136	49	1,361	32	1,329	395	3,484
1922	3,833	645	378	112	66	151	58	1,410	37	1,373	359	4,565
1923	3,757	754	444	127	90	146	63	1,623	63	1,560	409	5,726
1924	4,300	779	372	141	98	149	69	1,608	80	1,528	459	6,287
1925	4,584	990	415	179	117	227	87	2,013	75	1,938	471	6,993
1926	4,591	1,177	588	192	117	291	92	2,456	75	2,381	471	7,443
1927	4,289	1,206	563	194	114	287	117	2,481	67	2,414	474	7,177
1928	3,961	1,181	649	183	116	255	110	2,493	68	2,425	464	6,850
1929	3,424	1,186	761	151	122	187	108	2,516	84	2,432	464	6,320
1930	2,195	997	498	125	120	134	88	1,963	96	1,867	367	4,429
1931	1,396	582	228	89	101	112	54	1,166	56	1,110	259	2,765
1932	641	275	95	48	52	64	30	564	22	542	125	1,308
1933	314	143	134	27	22	30	17	372	10	362	175	851
1934	272	165	160	22	32	28	14	421	11	410	200	882
1935	* 533	209	149	26	41	34	13	472	12	460	284	*1,277
1936	*1,101	* 276	225	* 33	* 43	* 47	* 18	* 641	* 16	* 625	* 328	*2,054
1937	1,393	367	368	42	48	66	33	923	29	894	360	2,647
1938	1,285†	345†	244†	46†				768†	23†	745†	330†	2,360†

\*—Revised.

†Preliminary—subject to revision.

NO. VI—A SIGNIFICANT STUDY of private construction in the U. S. by Lowell J. Chawner of the U. S. Dept. of Commerce is summarized above. Based on the best data available for all types of construction, this table gives a complete picture of private construction in the U. S. Non-farm residential volume exceeded 4½ billion dollars in 1925 and '26. The peak of total construction was 7.4 billions in 1926, and the low was 8.5 millions in 1933. For full description of methods and data used in compiling this table, see "Construction Activity in U. S., 1915-'37," Bulletin No. 99, U. S. Dept. of Commerce.

analysts. One of these, William C. Bober, chief statistician of the Johns-Manville Company, who, because of a large number of direct contacts with the field is in a position to check theoretical statistics with actual sales of building products, told this publication, "We estimate the total number of non-farm residential units, both public and private, to be erected in 1939 at 500,000, which is very close to the 1929 totals."

What this large volume of residential building means to America can be readily grasped. It means that home building will lead the nation back to a sound recovery. *American Builder* has estimated, on the basis of special studies by Herman Byer, that an increase of 155,000 residential units next year will create 310,000,000 man hours of work at the building sites. It will also create an additional 465,000,000 man hours of work in factories, forests, mines and transportation. These 775,000,000 man hours of new work for the employees of building contractors and the employees of building material producers are equivalent to 425,000 man years of additional employment.

#### How Many Builders?

The number of contractors and operative builders required to perform this building and buy the materials and equipment that go into these structures is a large one. Of the estimated 100,000 to 150,000 contractors in the U. S., probably 40,000 will perform the principal part of the new home work next year, which would be an average of 12½ residential units per builder. However, since many contractors specialize in commercial or industrial work or modernizing, many will construct a smaller number of homes and others a much larger number.

The undoubted trend revealed by the 1938 building statistics is toward smaller homes and more homes built on a speculative or for sale basis. The FHA program has given impetus to the building of homes in the lower price ranges and has greatly stimulated their construction in better planned developments, both large and small. The trend towards lower priced homes is shown in Table III, which shows that 63.7 percent of the FHA insured homes in 1938 were on properties having a valuation of \$6,000 or less as compared with 59.3 percent in 1937. This table also shows that 81.6 percent cost less than \$7,000, which compares with 73.7 percent in '37 and 65 percent in 1936.

Another important development in 1938 was the expansion of rental housing construction, consisting largely of apartments and row houses built under Section 207 of the

NO. VIII—F. W. DODGE estimates for construction contracts in 37 Eastern states indicate sharp increases in commercial and industrial building and in residential building. A total construction volume of 3½ billions for 1939 is forecast, which is an 8% increase over 1938.

amended National Housing Act, Limited Dividend Division. This activity is reflected in Table II, where an increase in multi-family dwellings of more than 15,000 units is recorded. A further increase in this type of apartment and row house construction is anticipated in 1939.

#### Where Homes are Built

To the average builder, national construction figures are of use only as they indicate a trend which he can apply to his local town. A study of Table II and the underlying data shows that construction is widely diversified and spread out through the nation's 16,598 cities, towns and villages. The per capita rate of construction is highest in the smaller towns and cities. The most active residential areas are small towns and villages adjacent to the large cities. Many such communities are not even incorporated places, and residential construction in such areas is frequently not reported. The Bureau of Labor Statistics has made a series of studies in recent years of construction in these so-called rural areas and has found

#### Value of Modernizing and Maintenance, 1925-38

Estimates by U. S. Bureau of Foreign and Domestic Commerce

	Residential building	Non-Residential	
		Taxed	Tax-exempt
1925.....	\$610,000,000	\$210,000,000	\$180,000,000
1926.....	660,000,000	230,000,000	180,000,000
1927.....	710,000,000	250,000,000	190,000,000
1928.....	760,000,000	270,000,000	190,000,000
1929.....	820,000,000	280,000,000	190,000,000
1930.....	840,000,000	270,000,000	190,000,000
1931.....	570,000,000	180,000,000	130,000,000
1932.....	420,000,000	135,000,000	95,000,000
1933.....	370,000,000	120,000,000	80,000,000
1934.....	450,000,000	150,000,000	100,000,000
1935.....	580,000,000	190,000,000	130,000,000
1936.....	760,000,000	240,000,000	170,000,000
1937.....	810,000,000	250,000,000	180,000,000
1938.....	800,000,000	\$425,000,000	

NO. VII—THE TABLE ABOVE shows the value of modernizing and maintenance of residential and non-residential building from 1925 through 1938, as estimated by the U. S. Bureau of Foreign and Domestic Commerce.

#### Value of Construction Contracts (37 Eastern States) F. W. Dodge Corp.

Classification	1937 Actual	*1938 Estimate		1939 Estimate	
	Dollars	Dollars	% Change From 1937	Dollars	% Change From 1938
Commercial Buildings.....	297,043,000	225,000,000	-24	300,000,000	+33
Industrial Buildings.....	313,689,000	135,000,000	-57	250,000,000	+85
Educational and Science.....	223,208,000	290,000,000	+30	250,000,000	-14
Hospital and Institutional.....	81,845,000	120,000,000	+47	85,000,000	-29
Public Buildings.....	104,901,000	115,000,000	+10	100,000,000	-13
Religious Buildings.....	36,867,000	40,000,000	+8	40,000,000	0
Social and Recreational.....	83,826,000	115,000,000	+37	100,000,000	-13
Misc. Non-Residential.....	14,782,000	25,000,000	+69	25,000,000	0
TOTAL NON-RESIDENTIAL.....	1,156,161,000	1,065,000,000	-8	1,150,000,000	+8
Apartment and Hotels.....	223,857,000	269,000,000	+20	500,000,000	+86
1 and 2 Family Houses.....	681,436,000	716,000,000	+5	800,000,000	+12
TOTAL RESIDENTIAL.....	905,293,000	985,000,000	+9	1,300,000,000	+32
TOTAL BUILDING.....	2,061,454,000	2,050,000,000	-1	2,450,000,000	+20
Public Works and Utilities.....	851,606,000	1,190,000,000	+40	1,050,000,000	-12
TOTAL CONSTRUCTION.....	2,913,060,000	3,240,000,000	+11	3,500,000,000	+8

\*Based on ten months data.



a large per capita construction taking place there. Preliminary estimates by the Bureau for these areas, shown under Sections 8 and 9 of Table II, indicate an increase of from 82,900 units in 1937 to 98,500 in 1938. The fact that home building is carried on in many thousands of small communities in widely separated spots provides a definite answer to the dreamers and theorists who have been claiming that all the building industry in the U. S. can be consolidated in the hands of a few large building corporations.

One of the trends of the year has been the great interest shown by architects in the low-priced houses. A growing number of architects have entered into agreements with operative builders whereby they supply architectural drawings only. In fact, the successful operative builders have become the best clients of the members of the architectural profession who are interested in home building. A lower fee for this type of work is possible because no supervision nor, in fact, any direct contact with the construction work is involved. Because of the number of houses involved the income to the architect is sufficient to provide a reasonable return for his services.

One effect the FHA has had on residential construction is that more complete plans are now drawn in advance because they must be filed with FHA in order to secure a loan. The builder may file a set of plans drawn by an architect in his employ or a set purchased from a local architect, or the plans of one of the well-known plan services. The result is that practically all houses today may truthfully be said to be "architecturally planned." Architectural supervision, however, is a different matter. Less than 7 percent of the nation's single-family homes are built with architectural supervision.

#### Modernization Outlook Good

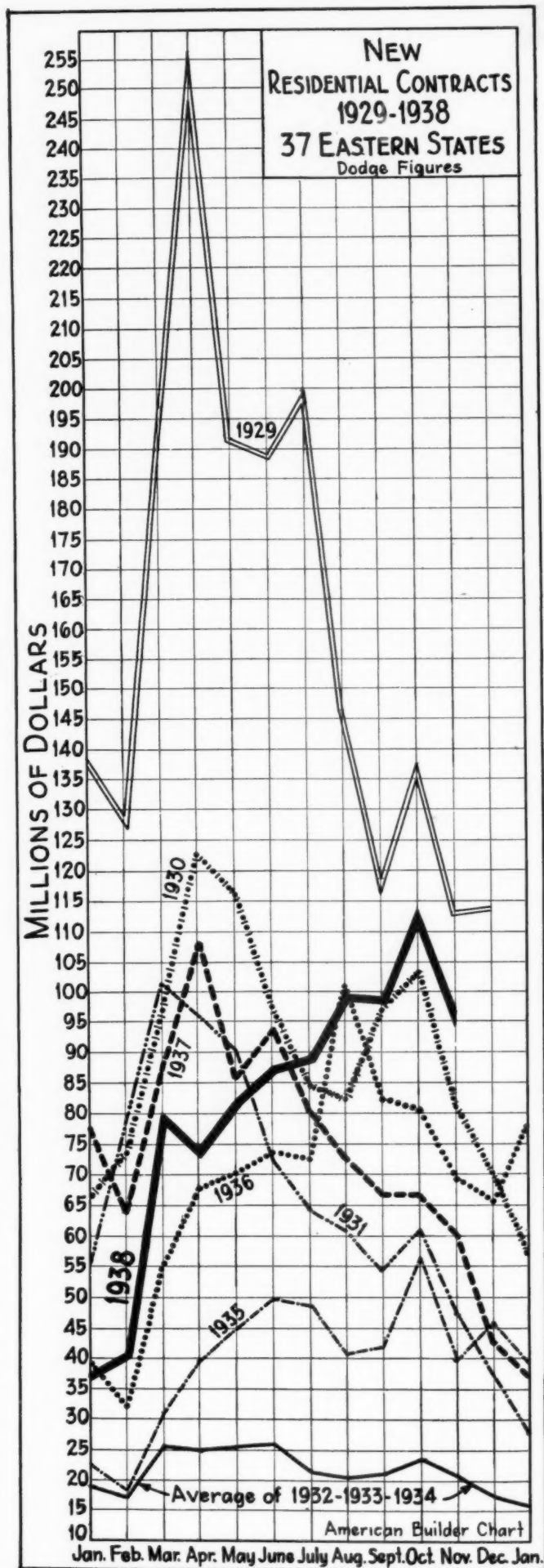
While new home construction gets the spotlight for 1939, builders should not ignore the extensive possibilities of the modernization and repair market. This tends to increase at almost the same rate as general building construction and general economic improvement. The FHA Property Improvement Plan had a definite effect on modernizing in 1938. Some 312,600 notes amounting to \$144,000,000 were insured by FHA following the passage of the amendments to the Housing Act in February and up to November 19. FHA reports that 87 percent of the number of loans and 75 percent of the amount were for new structures or for improvements to small residential dwellings. Additions, alterations and roofing accounted for 31 percent of the loans, and exterior painting and interior finishing 26.5 percent. Heating and plumbing were major items accounting for 23.9 percent.

Prospects for a considerable improvement in residential modernizing in 1939 are good, and a similar improvement is foreseen in commercial repairs and improvements, including such improvements as air conditioning and new store and shop fronts.

#### Commercial and Industrial

The F. W. Dodge Corporation in its analysis of the construction outlook for 1939 foresees a pronounced expansion in commercial and industrial buildings. "Revival of business confidence," it is stated, "tends to stimulate commercial building; increases are more likely in small new projects and modernization work than in large structures." A 33 percent increase in this type is forecast.

The Dodge organization points out that many plant extension programs, deferred in 1938, are likely to be encouraged by renewed business optimism. The government's defense program is likely to stimulate plant extension, modernization and new factories. An increase in this classification of 85 percent is forecast.





### Invites Attention

FROM THE living room, three French doors open out into this charming outdoor spot which has been planned with as much skill and attention as the inside of this Connecticut home designed by Architect Chester A. Patterson and built by Peter A. Cameron. An entrance view of this house appears on the cover; plans and further details on the next page.



## A Double Portfolio of Homes for 1939

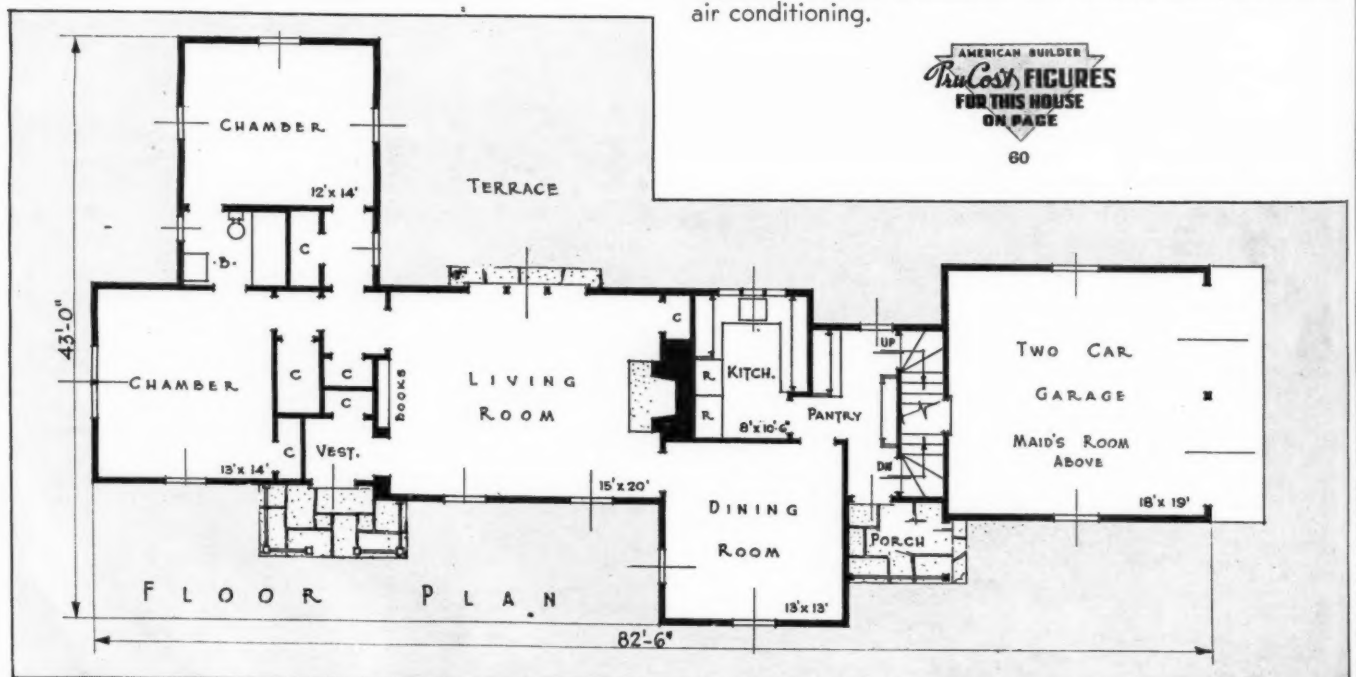
AT THE OPENING of what promises to be the best home building year in a decade, AMERICAN BUILDER here presents a double portfolio of homes selected for the 1939 market. These houses are not the theoretical imaginings of some magazine staff artist, nor are they the visionary dreams of some draftsman drawing pictures for an architectural competition. These are practical, salable homes designed by practical practising architects and built by builders for real-life customers. AMERICAN BUILDER believes that the successful homes of today point the way to the successful homes of tomorrow and believes that the following selection is worthy of careful study in laying building plans for an active year in 1939:



## RAMBLING COLONIAL IN RURAL CONNECTICUT

**Chester A. Patterson, Architect**  
**Peter A. Cameron, Builder**

ALL OF THE ROOMS of this country house in Connecticut are on one floor except a maid's room and bath over the garage, the floor of which has been dropped. There is good circulation between rooms and plenty of light and air. The hand-split exterior wall shingles are painted white, and the roof a tobacco brown. Blinds are blue-green. The front entrance detail with picket fence around flagstone stoop and Colonial hardware as shown on the cover and the rear living terrace as on the preceding page are refined details approved by today's buyers. Cubage is 30,000 ft. House is insulated with mineral wool; has winter air conditioning.





## MICHIGAN EXHIBIT HOME STYLED FOR MODERN LIVING

**Displayed at Bay City, Mich., by  
Nurmi Builders, Inc., Architects,  
Contractors and Home Designers**

BUILT to create an appreciation of today's professional home design service and construction as offered by the complete staff of Nurmi Builders, Inc., this house of contemporary design was planned as the home of Mr. and Mrs. Nurmi, to be occupied after being exhibited. Formal invitations to a select group of prospects for homes in the

upper price range drew 7,000 visitors within a two-weeks period. After showing the house to special groups, it was finally opened to the general public. There were no signs used which would mar the decorative exterior.

Mrs. Nurmi, the creative member of the firm, believes in careful study of the problems of efficiency, architectural design and selection of materials to meet the specific requirements of a family according to the needs of modern living. The clean-cut styling in the exterior above and the many unusual features of plan indicate a complete thoroughness of approach. Interior views on the following two pages show some of these modern and novel plan ideas.

AMERICAN BUILDER  
**True Cost FIGURES**  
FOR THIS HOUSE  
ON PAGE

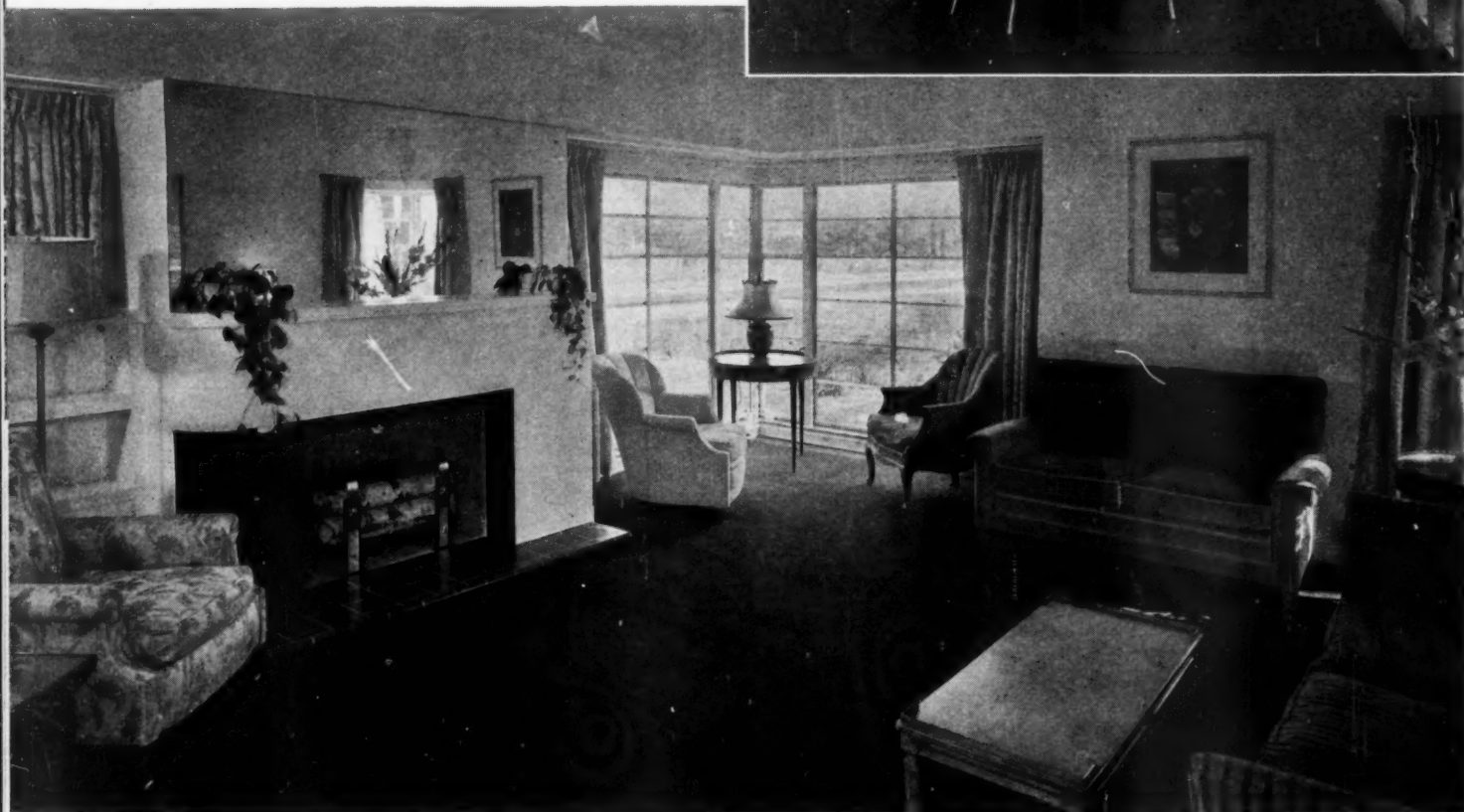
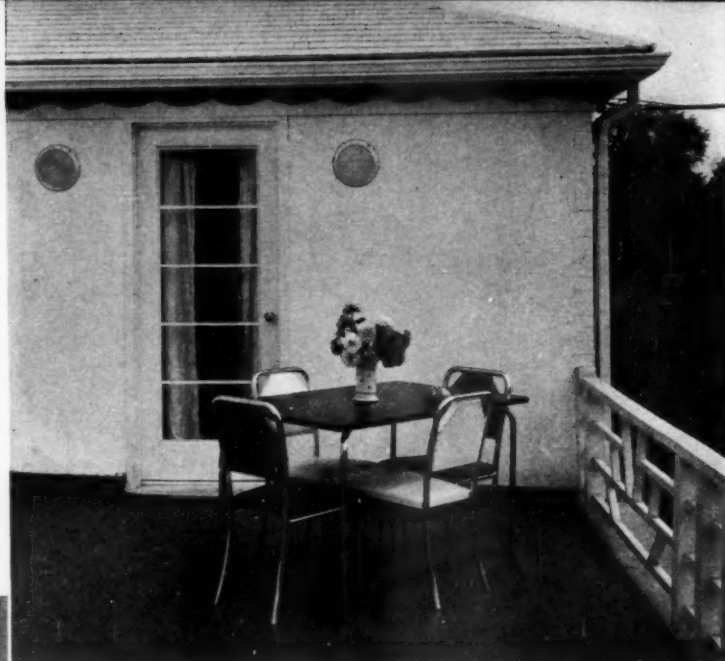
60





## INTERIORS AND DETAILS OF NURMI EXHIBIT HOME

THE interiors, details and equipment of this modern home built by Nurmi Builders, Inc., Bay City, Mich., are as carefully planned and selected as the features of exterior and plan shown on the preceding page. The house throughout is arranged for comfort, efficiency and permanence according to today's highest standards of home building.



LEFT: The "indoor playground" or game room is located on the first floor next to the library. A large group of windows occupies most of the outside wall and assures plenty of light. Walls are finished with avodire Celotex Texbord. Mouldings, cabinets and doors are birch bleached and stained to match. Lockwood hardware was selected to harmonize with styling. Door ornaments and mouldings around recessed ceiling lights are lacquered Chinese red. A small door above the built-in cabinet opens to the kitchen for food passage. The door on the inside corner gives access to the first floor utility room used for the winter conditioning plant and storage space.



THE labor-saving convenience of the General Electric kitchen, including range, refrigerator, and dishwasher appealed greatly to the women who inspected the Nurmi exhibit home. Modern lighting fixtures, electric clocks and kitchen ventilating fan are other items which attracted attention. Breakfast nook adjoins the kitchen on the other side of tiled counter top. A door from the kitchen opens into the handy first floor laundry.

ABOVE, on opposite page: A good sized roof terrace with access from two of the bedrooms gives a pleasant spot for outdoor living while more formal indoor living can be arranged in the well lighted living room of Neo-Classic styling. A liberal use of mirrors adds further to the modern spacious effect.

RIGHT: In the garden dining room, the out-of-doors view is brought into the house with a large picture window which extends practically to the floor and is divided with horizontal muntins. The dome ceiling is cove lighted and has a system whereby the intensity can be controlled. Door opens to porch.



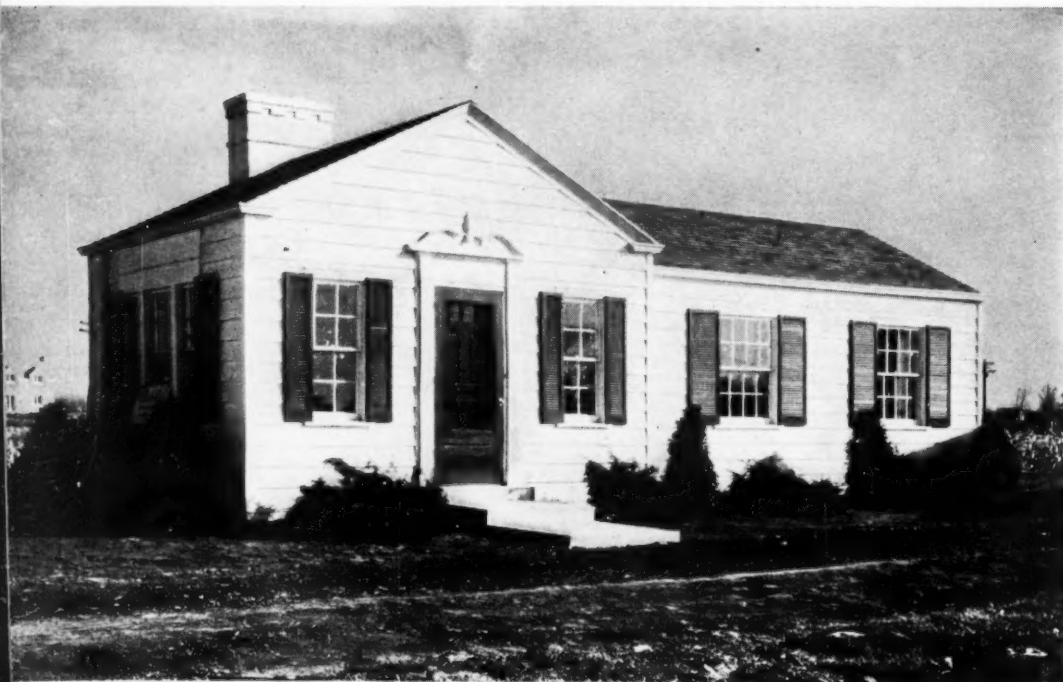
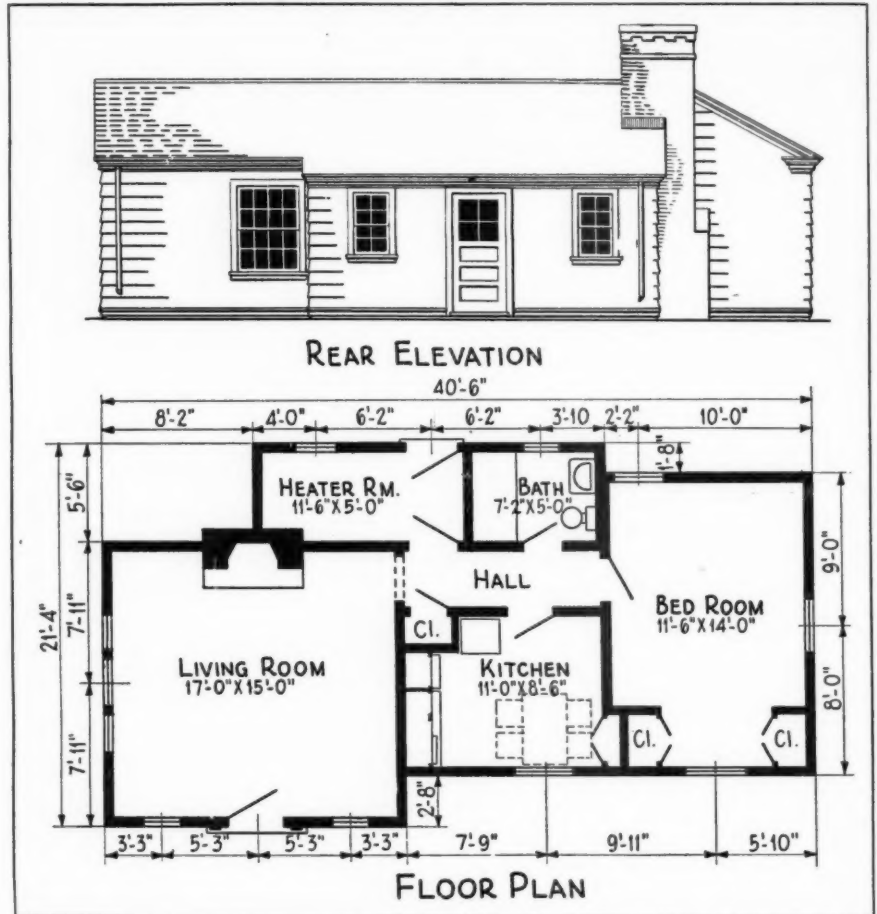
A WALL in one of the bedrooms is paneled and stained dark to contrast with the murals above the light wainscot on the other walls. Ceilings of second floor rooms are plastered over 1-inch Celotex Vapor-seal lath. Other features of this house are as follows: Cement block foundation, frame construction with Vapor-seal sheathing on outside and 1/2-inch Vapor-seal lath on inside. Brick veneer exterior, red cedar shingle roof, Traffic Top roof deck, Hope metal windows glazed with L-O-F glass, Tiletex asphalt floors in recreation and service rooms, Crane plumbing fixtures, Anaconda copper piping, G-E gas-fired winter conditioning.



## ATTRACTIVE REAL ESTATE OFFICE INSPIRES THE BUILDING OF SMALL HOMES

WHEN Lewis T. Dodds opened his real estate business in the attractive Colonial office pictured above at right, which he had built last year in Northfield, Ill., he did not then realize what a fine advertisement the building would prove to be. It is located at a busy intersection on route U.S. 41, and commands the attention of many passing motorists. Since occupying the building, Dodds has had people come in to try to buy this office as a place to live or to see if it could be duplicated elsewhere. In fact, he has even received inquiries from out of state regarding the availability of plans, price, etc.

SINCE the public reacted so favorably to the style and price of his office building, the Cee and Eee Construction Co., Chicago, has recently designed and built two small houses of about the same style and size for Dodds on nearby lots. The smaller of these, a compact three-room basementless house which he calls "The Newlywed" is shown below with floor plan at the right. This one more nearly follows the exterior and layout of the office. The other one, as it appears on the opposite page, has four rooms including a second bedroom. The entrance has been moved to the main wing on that house which does not as closely duplicate the original building as the other.

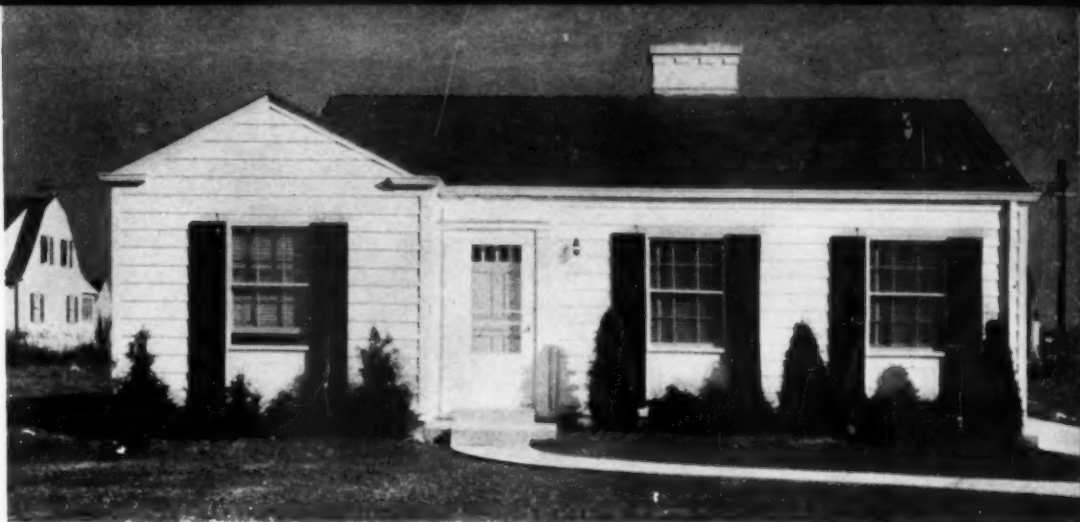


THE small three-room house at the left with floor plan above is about the last word in compactness. At the same time, however, it retains plenty of livability for one or two people. The living room has a Colonial wood-burning fireplace. Heater room directly to the rear uses a flue in the chimney for the gas-fired air conditioning system, and this same room also houses a laundry tray. Dining space is provided in the kitchen. The good sized bedroom has three exposures and twin closets at one end.

AMERICAN BUILDER  
*The Cost* FIGURES  
FOR THESE HOUSES  
ON PAGE



THE four-room small house at right with plan and elevations below is the larger of the two Lewis T. Dodds homes. It offers the same compactness and good design, but as extra features it was given an entry, small dinette and second bedroom. Closets are unusually good-sized for such a small house. Utility room contains gas-fired winter conditioner and laundry trays. Designed and built by Cee and Eee Construction Co., Chicago.



### CONSTRUCTION OUTLINE

**FOUNDATION:** Poured concrete footing and foundation extending below frost line.

**EXTERIOR:** Celotex Vapor-seal sheathing on frame with red cedar siding painted white on exterior walls.

**ROOF:** Red cedar shingles.

**INTERIOR FINISH:** Three-coat plaster over U.S.G. Rocklath, reflective type.

**FLOORS:** Oak, except Armstrong linoleum in kitchen and bath.

**PLUMBING FIXTURES:** Kohler, in kitchen and bath.

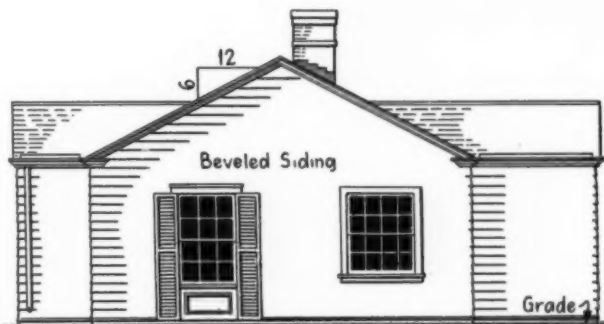
**HEATING:** Janitrol gas-fired winter air conditioning.

**HARDWARE:** Yale & Towne.

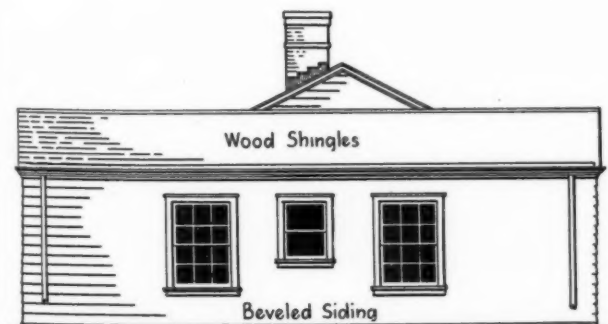
**LIGHTING FIXTURES:** Framberg fixtures in Colonial designs.



FRONT ELEVATION



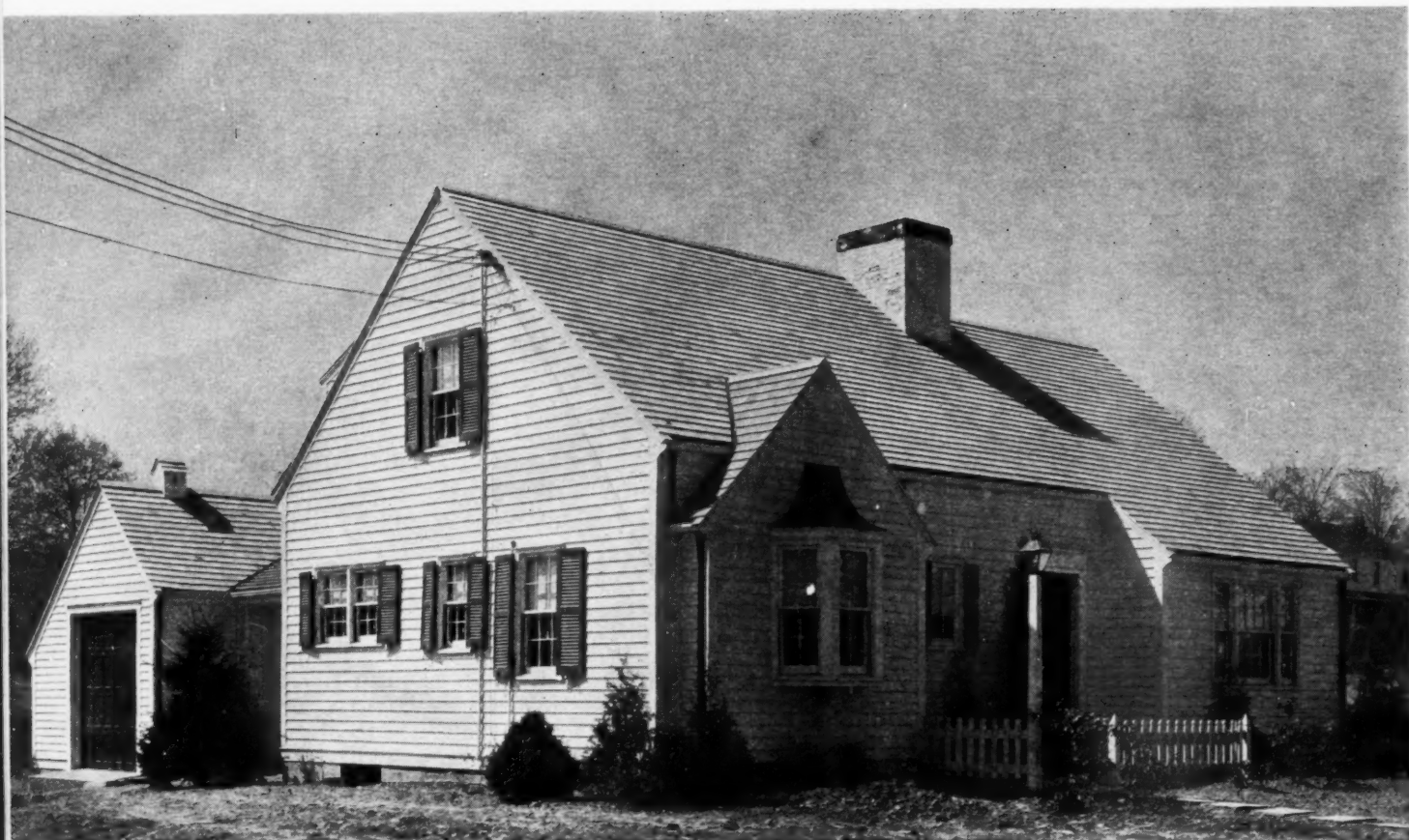
RIGHT ELEVATION



LEFT ELEVATION



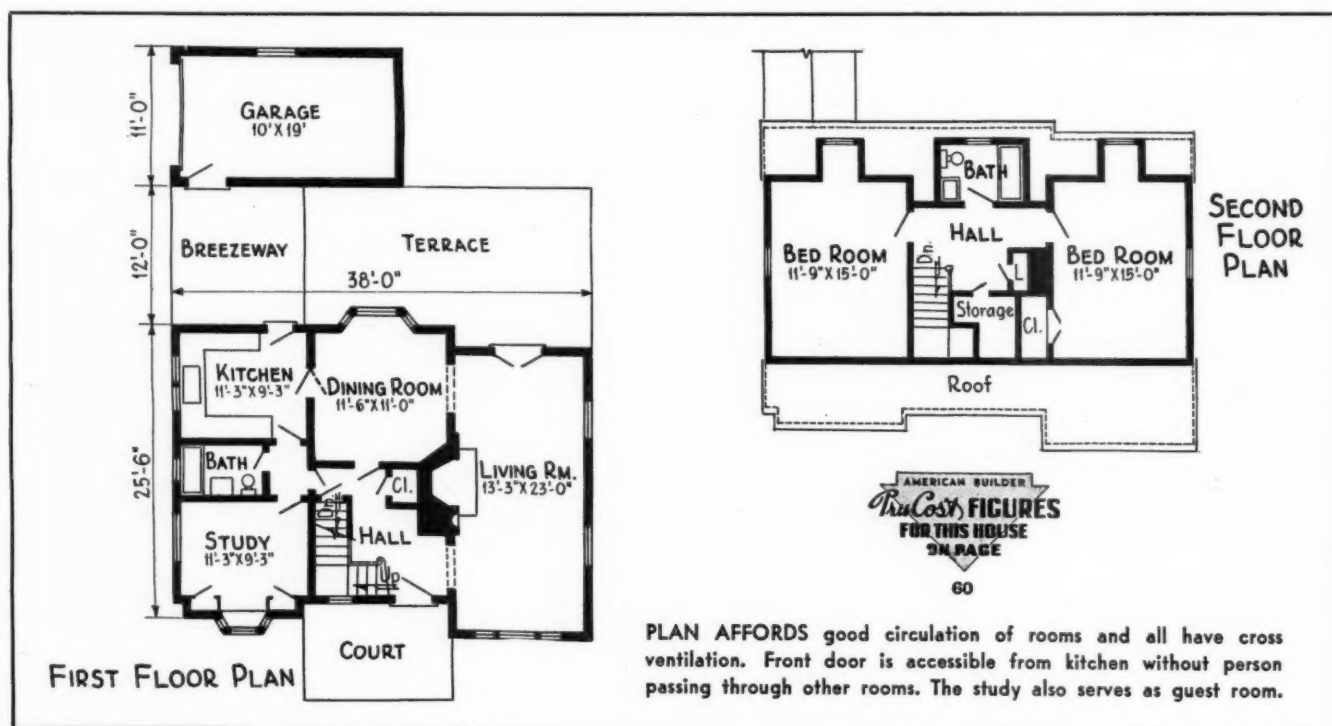
REAR ELEVATION



THIS IS a popular and proven type of Colonial home in Hartford, Conn., one of the interesting features of which is the "breezeway" connecting kitchen with garage. With a cubage of 24,500, this little house provides a lot of living comfort. It has a pecky cypress recreation room in basement, brass pipe throughout, Schlage hardware, Briggs Beautyware fixtures, winter air conditioning.

## HARTFORD HOME WITH BREEZEWAY

**Fred Kenyon, Builder**  
**Norris F. Prentice, Architect**





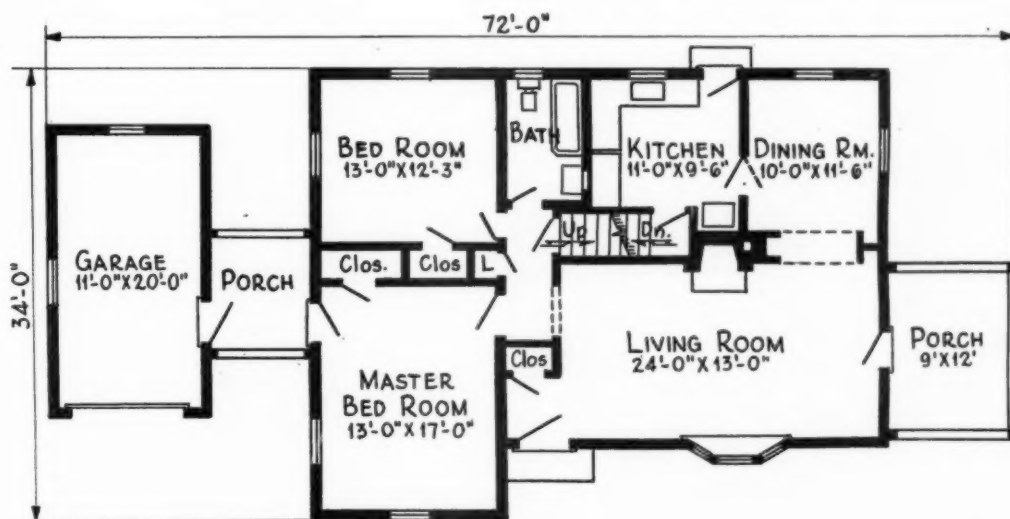
FIVE ROOMS, bath, garage and porch are provided by Homecraft Associates of White Plains, N. Y., in this attractive small "picture home." Two additional rooms can be added at any time in the attic space. The floor plan is compact and livable, with a large living room dominated by the bay window. It is fully insulated with mineral wool and heated by an oil-fired steam boiler.

## "PICTURE HOME" 5 ROOMS AND BATH; ATTACHED GARAGE

AMERICAN BUILDER  
*The Cost* FIGURES  
FOR THIS HOUSE  
ON PAGE

60

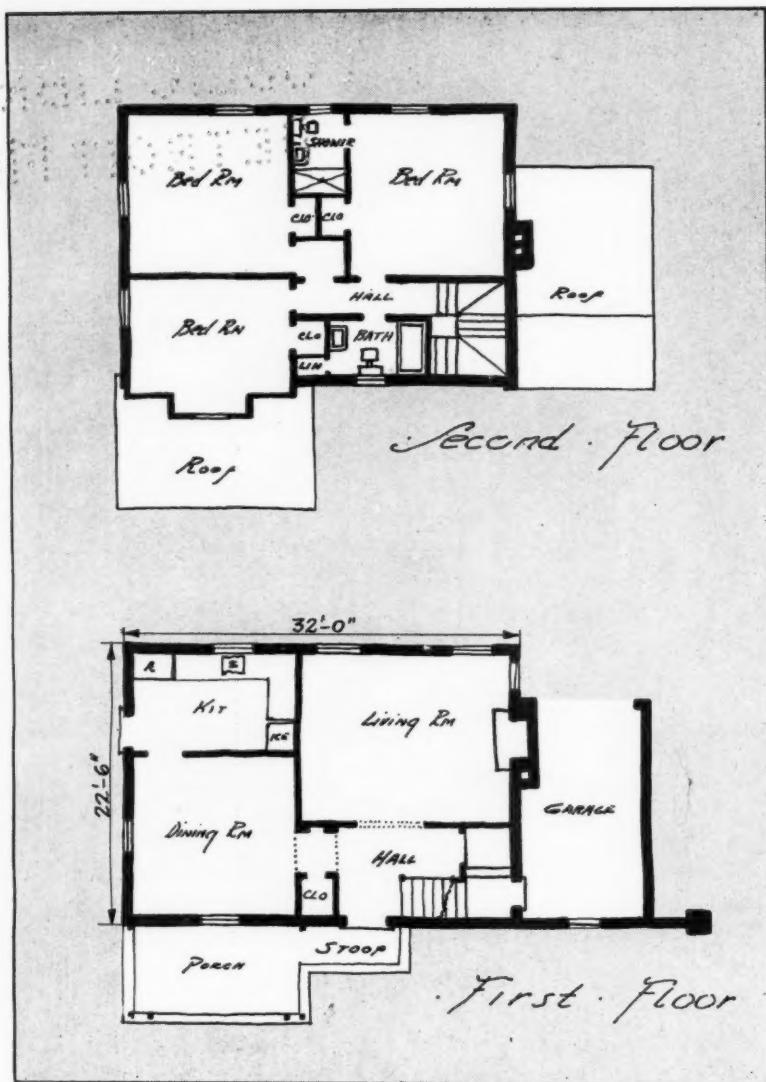
A VERY livable and practical arrangement of rooms. Hall, stairs and fireplace are economically grouped, and the bathroom is in a convenient location accessible from both bedrooms and the living room. The attached garage and open porch are good features.



FIRST FLOOR PLAN



## STONE AND OLD BRICK IN VIRGINIA HOME



WELL ARRANGED floor plan with 6 rooms, 2 baths, southern exposure in living room and efficient stair hall.

MATT. P. WILL of Richmond, Va., built this Southern home in Glenburnie subdivision at Richmond, Va. It was designed by Architect A. L. Kidwell. In describing the house Matt. Will says it is "complete in every detail for comfortable living." It has ample closets, southern exposure in the living room, 2 good baths, well placed attached garage. The exterior uses a combination of old brick, vari-colored stone, wide beaded joint siding, an attractive slate roof.

INCLUDED IN THE EQUIPMENT are an electric range and refrigerator, shades, screens, wide oak floors, complete interior decoration including wallpaper. With overall dimensions of 32' x 22½' and a cubage of 26,300, it provides a most livable, comfortable home.





IN GOOD COLONIAL STYLE, the large chimney and fireplace is the center of attraction in this fine Richmond home built by Matt. P. Will in Glenburnie subdivision.

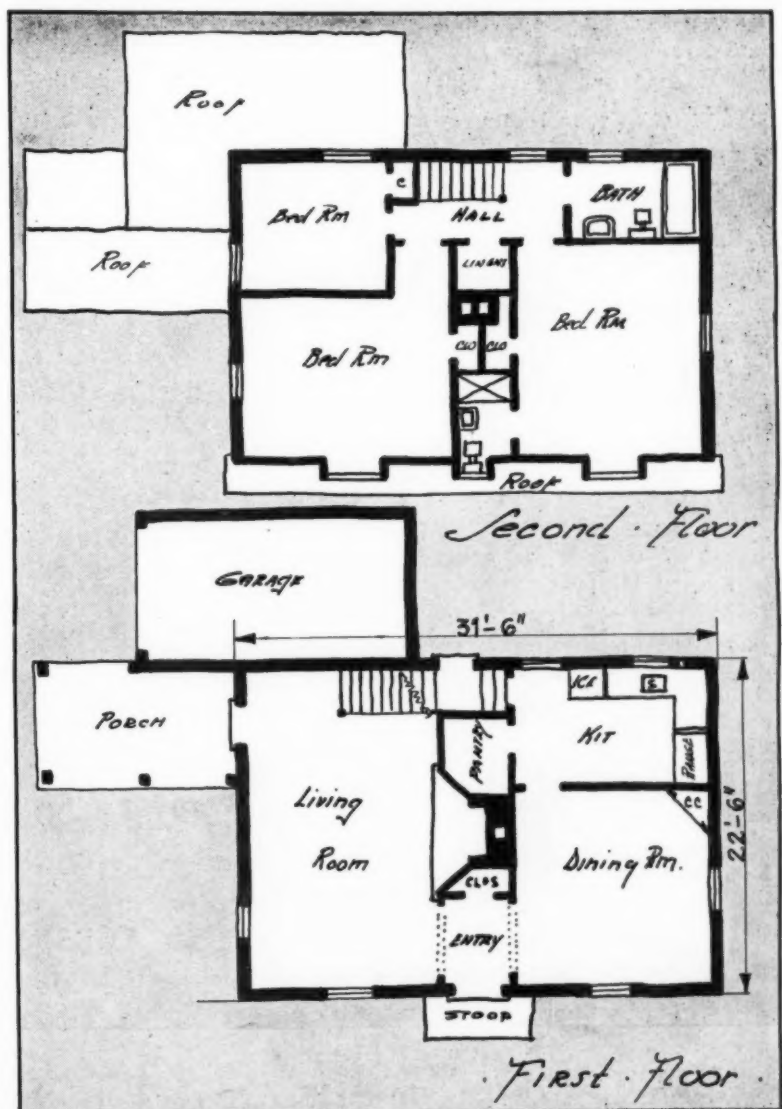


## A GEM FROM THE OLD SOUTH

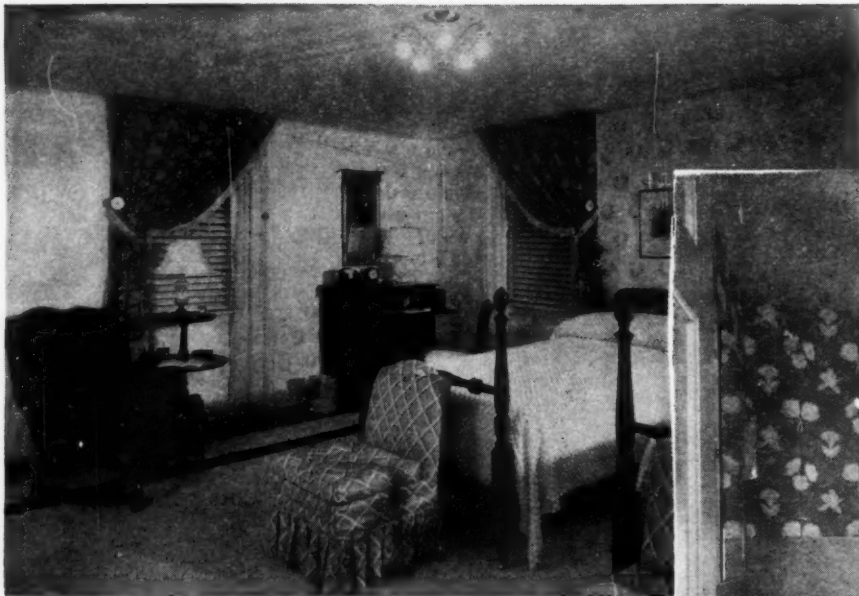
THIS CHARMING SOUTHERN HOME fits into its environment in Richmond, Va., in a way that shows it was designed and built by men who know their business. Old Virginia brick is used for the exterior. The roof shingles are of asbestos and cement simulating old, weather-worn wood shingles. It was built by Matt. P. Will, who describes himself as "master builder" and has well earned that reputation. The architect was A. L. Kidwell.

HEATING consists of a water heater system with oil burner, and equipment includes an electric range and electric refrigerator. The floor plan is unusually compact and livable, with large well lighted rooms, good closets, no waste space. The open porch and attached garage are desirable features. Basement dimensions are  $31\frac{1}{2}' \times 22\frac{1}{2}'$ , and the cubage 23,000 cu. ft.

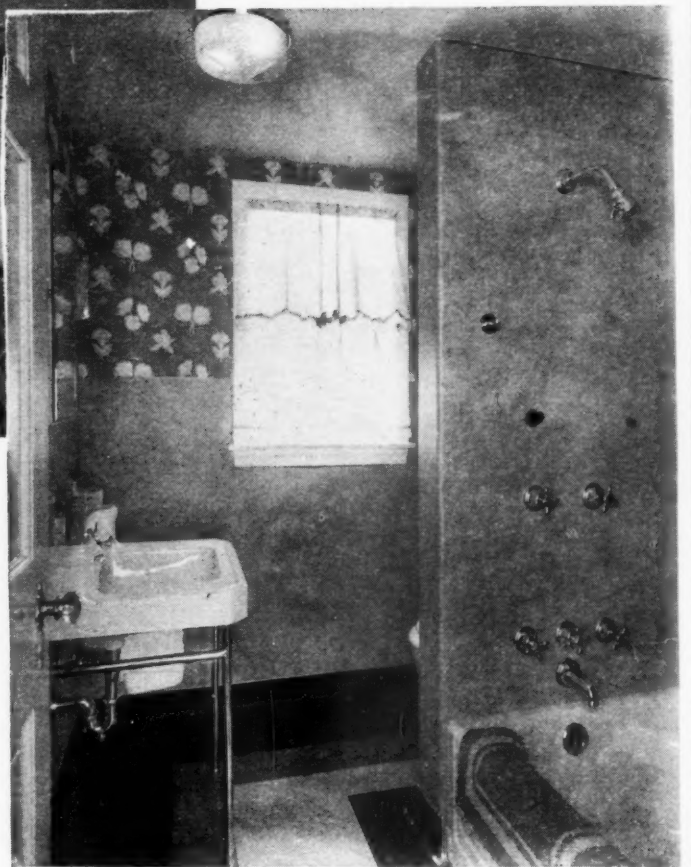
41







LEFT: Attractive Bed Room in Model Lancaster, Pa., Home, demonstrating Recent Style Trend.



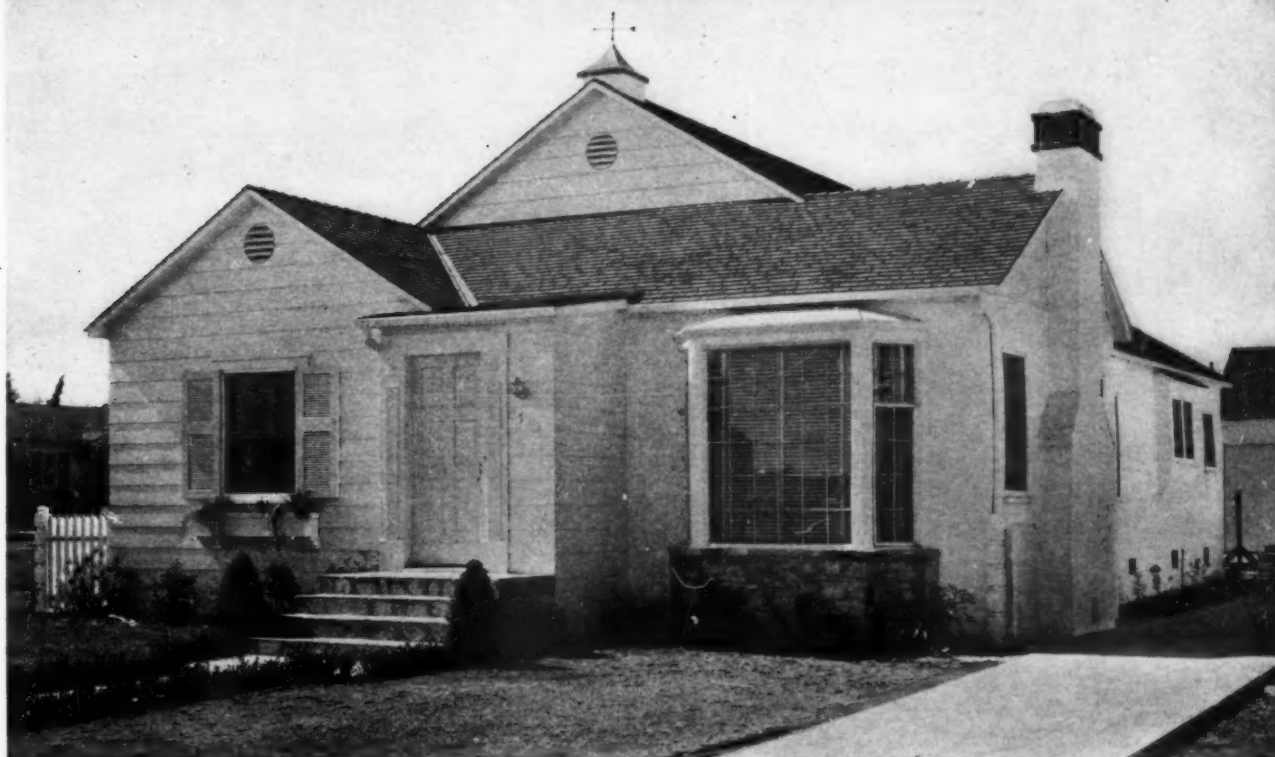
## GRACEFUL INTERIORS

in Model Home Sponsored  
by The Lancaster, Pa.,  
Real Estate Board

BELOW: Colonial Dining Room; Right: Colorful Bath Room.







## BROADWAY MODEL HOME IN LOS ANGELES

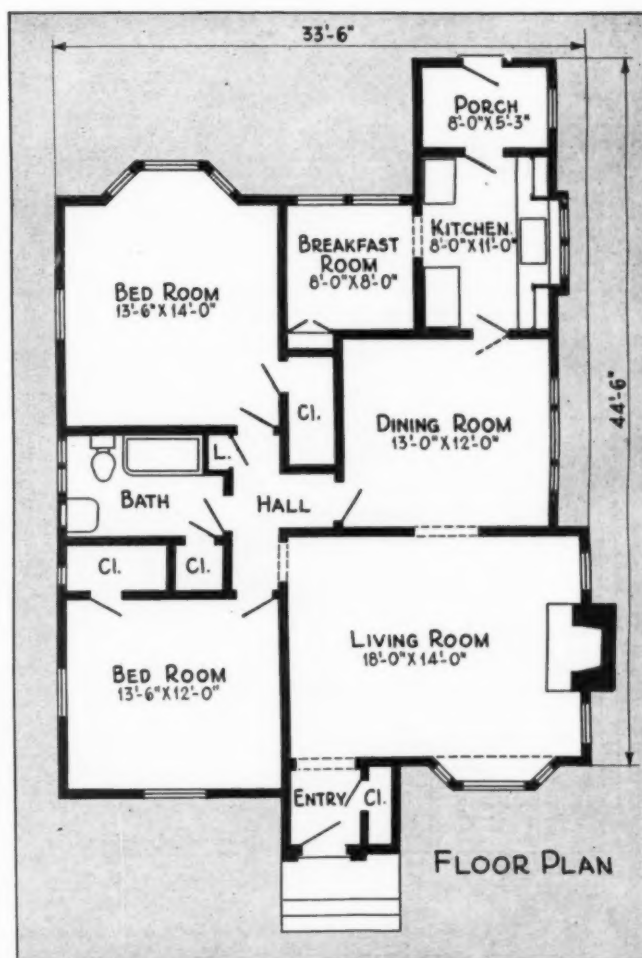
### A Modified Cape Cod Design Adapted to California

**William T. Richardson, Los Angeles, Builder**

COLONIAL type of design continues its nation-wide popularity extending as far from its origin as southern California. This 6-room Los Angeles model home is an adaptation in plan and style to local conditions. The exterior is of redwood siding and white stucco, the front mainly being of redwood. No. 1 grade marked lumber is used throughout. The cedar shingle roof is painted black, the shutters blue. The pine picket fence is attached to turned redwood posts. Flagstone veneer is used under the bay of the living room. Front steps also are of flagstone. Windows have steel sash.

THE interior trim, including all doors, is of Oregon pine, painted white. The entrance door, a six-panel Colonial, is marked at each side by fluted casings. Louvre doors connect living room with dining room and hall. In the living room, hard wall textures are given three coats of paint. The wood-burning fireplace in this room presents a white stucco face with a white pine mantel. The hearth is of black tile, the fire-box of white fire-brick. A 2 foot 6 white pine wainscoting in paneled effect extends around the dining room, with wallpaper above. Washable wallpaper is used in the two bedrooms, breakfast room and bathroom.

FLOORS throughout are of  $1\frac{1}{2}$  x 2 inch clear red oak. A 4-inch band of tile is applied below the wallpaper in the bathroom. An unusual feature of this room is the glassed-in tub and shower combined, fitted with Standard plumbing fixtures. The breakfast room has an interesting built-in corner buffet with glass shelves above and white pine cupboard below. Gladding McBean Hermosa tile is laid from floor to ceiling in the kitchen, which also has indirect lighting at each side of the sink. Heating is provided by two dual Ward floor furnaces, located in hall and living room.

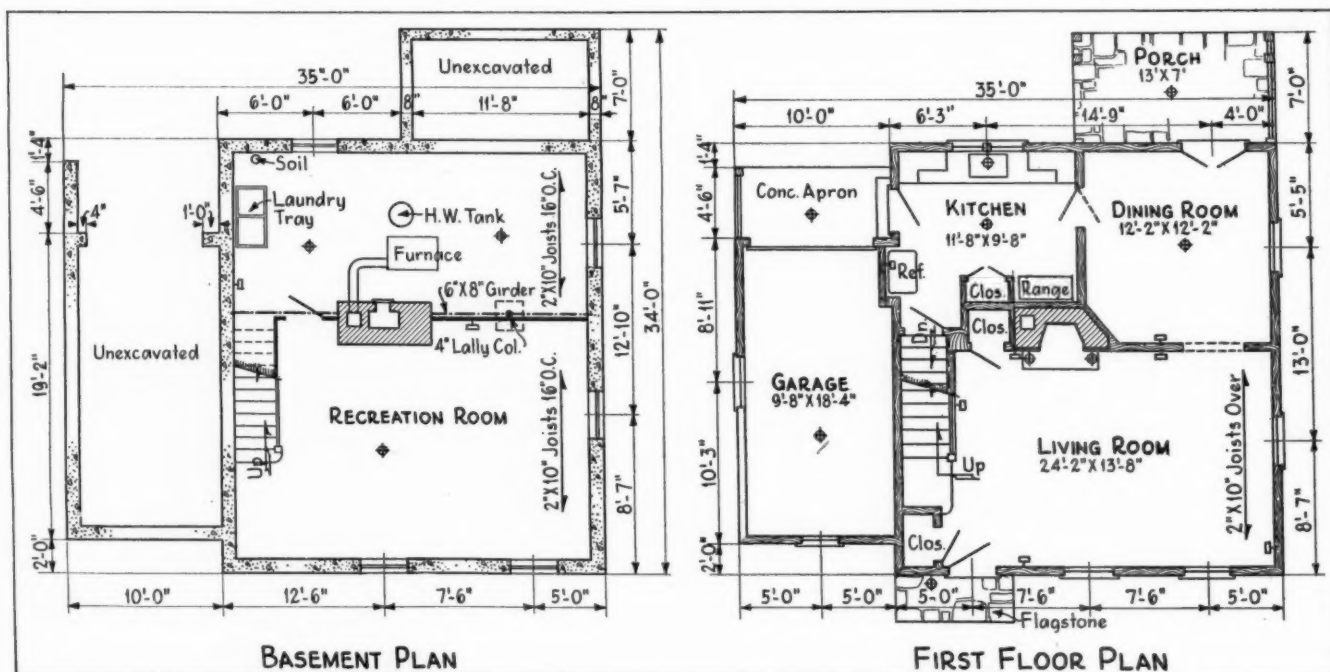


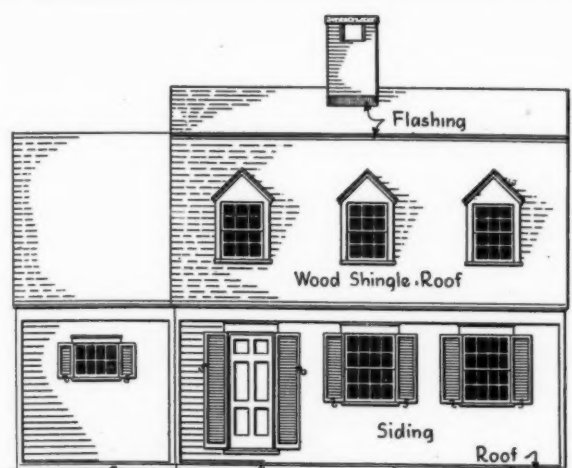


COMPACT, livable, economical are the best words to describe this little Dutch Colonial built in Cheelcroft subdivision at Ho-Ho-Kus, N. J.

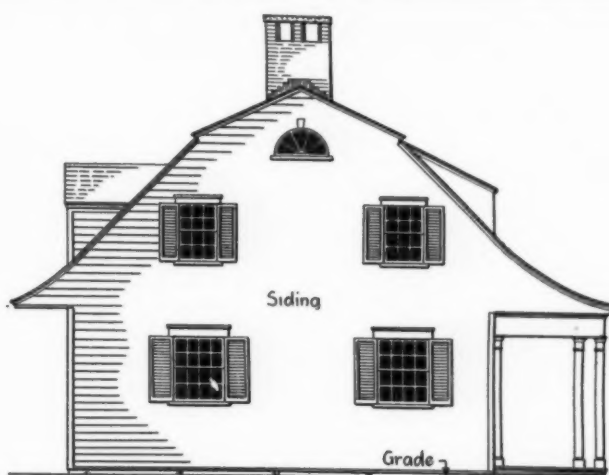
## 6-ROOM DUTCH COLONIAL, 25x27 FT., ATTACHED GARAGE

**J. Norman Hunter, Architect; Harold W. Cheel, Builder**

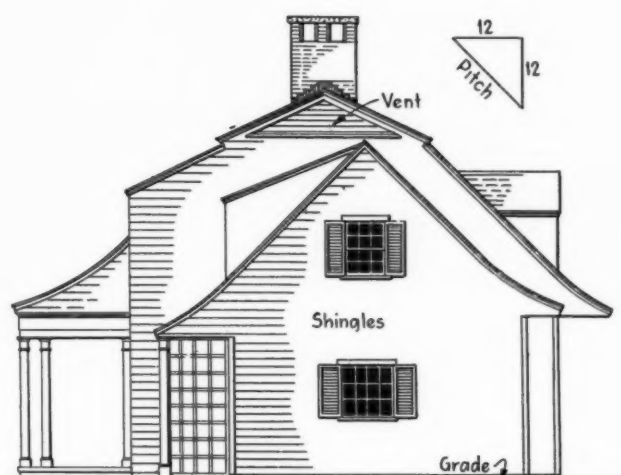




FRONT ELEVATION



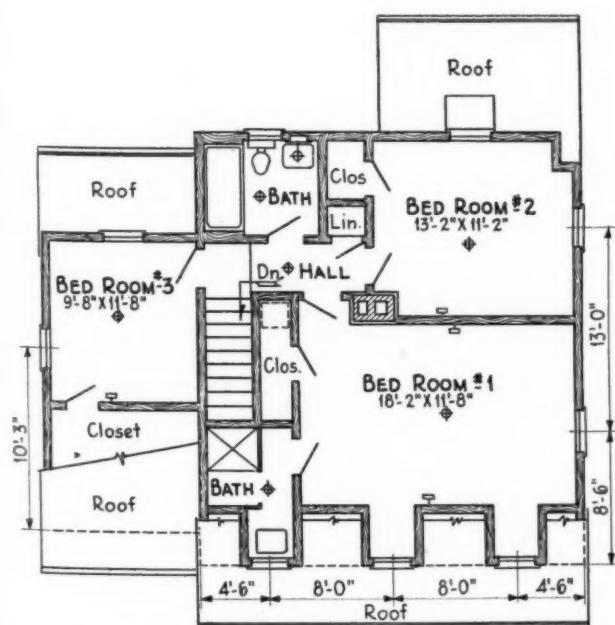
RIGHT SIDE ELEVATION



LEFT SIDE ELEVATION



REAR ELEVATION



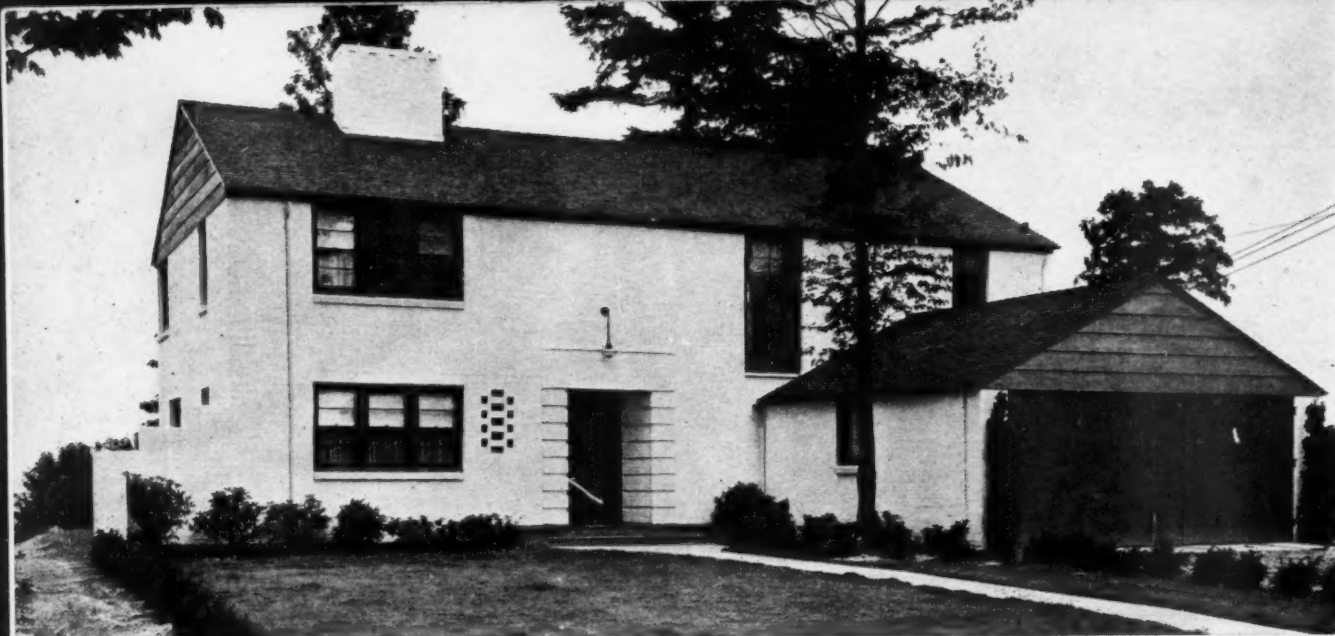
SECOND FLOOR PLAN

## FEATURES THAT SELL

ARCHITECT HUNTER and Builder Cheel have here produced a house with practical built-in sales appeal. The main part of house is only 25' x 27', but by putting every inch of space to work and placing a small bedroom over the attached garage, it has been possible to make it a 6-room house with 2 baths, a fair-sized dining room and a living room 21' 8" x 13' 8". The house is of attractive Dutch Colonial design, with a trellised open porch at rear. Concrete apron of garage serves as porch.

AMERICAN BUILDER  
*The Cost* FIGURES  
 FOR THIS HOUSE  
 ON PAGE



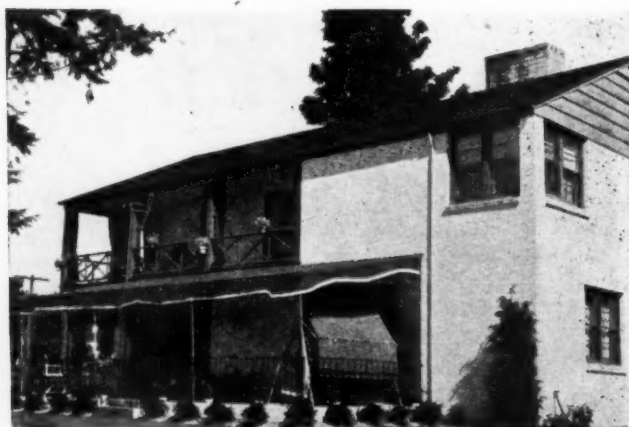


## MONTEREY STYLE AT BLUE RIDGE, WASH.

**Built by Hugh Russell, Seattle, Wash.  
W. E. McKinney, Seattle, Architect**

THIS 8-room Monterey style house, designed by W. E. McKinney, Seattle, Wash., architect, is finished with hollow tile, brick facing and lapped cedar siding trim. Den, entrance hall and kitchen are placed at the front of the house, and living room, dining room and breakfast room at the rear, which overlooks the wide expanse of Puget Sound.

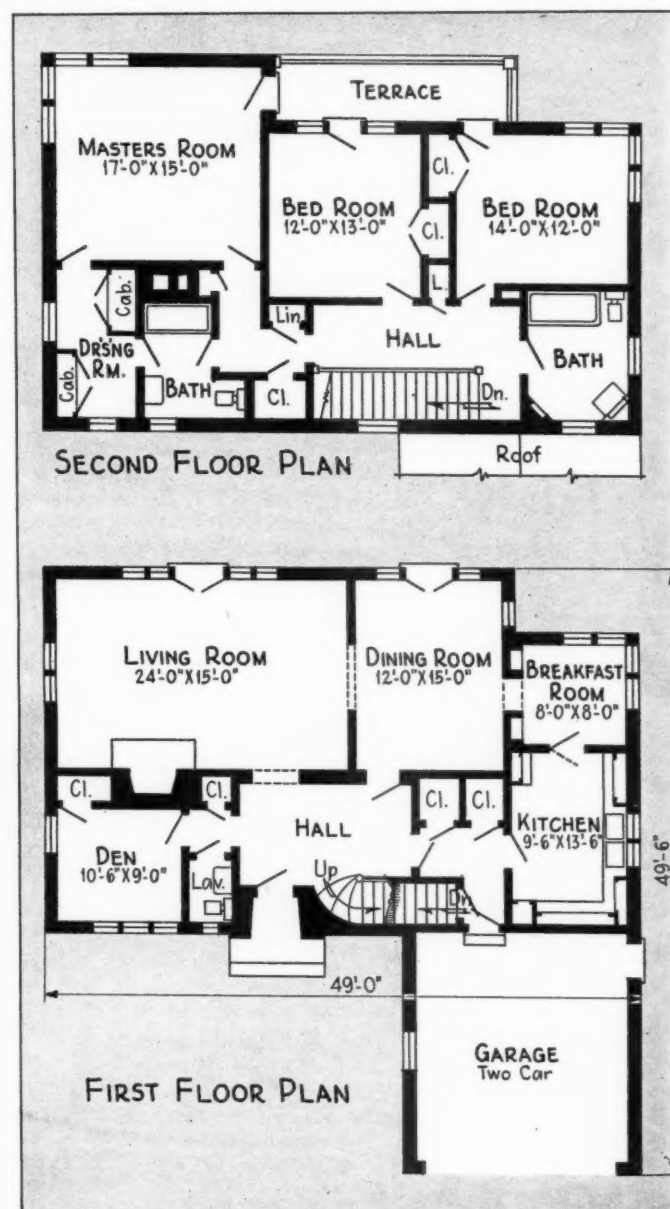
The entire left side of the upstairs is given over to the owner's quarters, which include bedroom, dressing room and bathroom. An additional bathroom is provided for the other two bedrooms. A long recreation room, laundry, heater room and storage space are located in the basement. Other features are Montag air conditioning plant; National Steel Construction Co. storage water heater; Standard Sanitary plumbing fixtures; Armco iron gutters and downspouts; Bondex waterproofing cement paint; Masonite stair treads and panel work; Reardon's washable calsomine; Imperial wallpapers.



REAR of this Blue Ridge house built by Hugh Russell overlooks Puget Sound; living and dining rooms open onto a paved terrace with protecting awning; covered balcony connects the bedrooms.

AMERICAN BUILDER  
*The Cost* FIGURES  
FOR THIS HOUSE  
ON PAGE

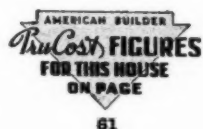
60





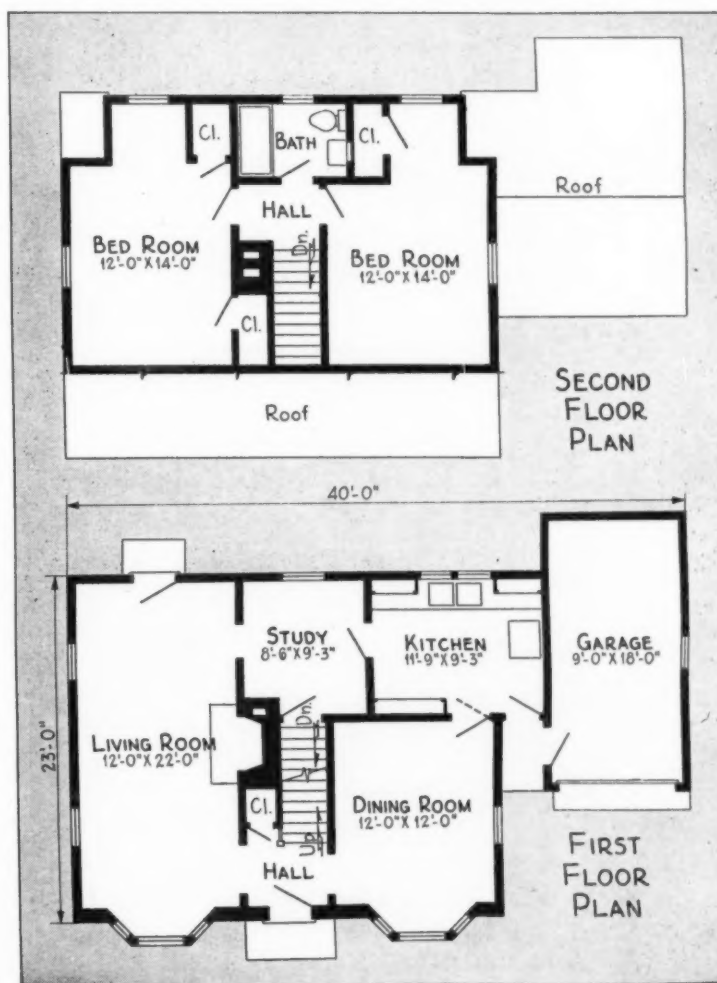
## 6-ROOM, ATTRACTIVELY STYLED, BRICK FRONT COLONIAL—ONLY 17,000 CU. FT.

**Wallace B. Goodwin Co., Builder**  
**Norris F. Prentice, Architect**



WITH A FLOOR AREA of approximately 30' x 23', Architect Prentice and Builder Goodwin have here secured a good-looking little Hartford, Conn., house with a cubage of slightly over 17,000 cu. ft. The sweep of the roof makes the house hug the ground and fit its site in a pleasant way. The 2 bay windows give a nice decorative effect to the front and increase the size and pleasantness of the rooms. The stairs, front-hall closet and fireplace are compactly handled, and the study between living room and kitchen is a very desirable feature.

BUILDER GOODWIN uses Morgan Colonial trim, metal kitchen cabinets; Balsam Wool blanket-type insulation; Richvar radiators, with a warm water system operated by an oil burner. The manner in which the garage is attached to the house, leaving space for the kitchen door, is interesting.



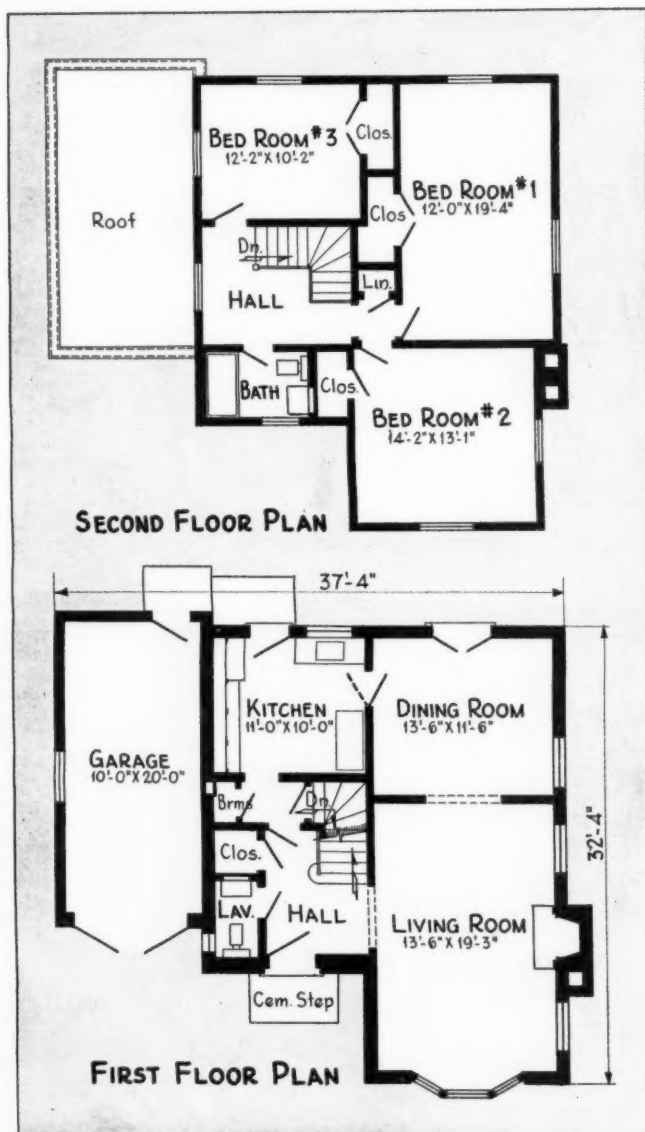




THE Blietz house shown at the left is styled after the Connecticut Colonial type of design having a veneer of Briar Hill sandstone on the first floor, with wide beveled siding painted white above. The white picket fence encloses a trim dooryard. Living room bay is nicely placed below the overhanging second floor. In plan, circulation through the entrance hall to the rear is good, with easy access to the basement.

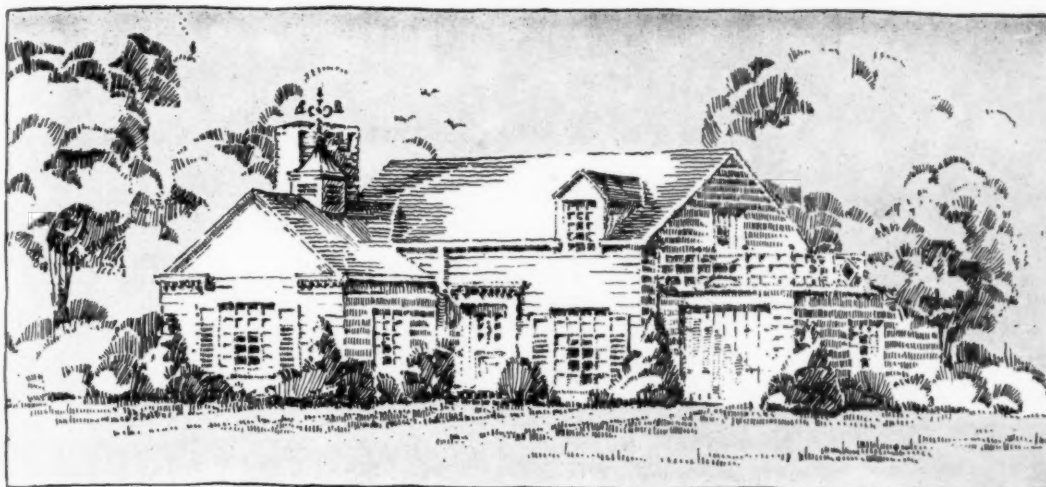
## TWO 6-ROOM COLONIAL HOMES IN EVANSTON, ILL.

**Irvin A. Blietz, Wilmette, Ill.**  
**Designer and Builder**

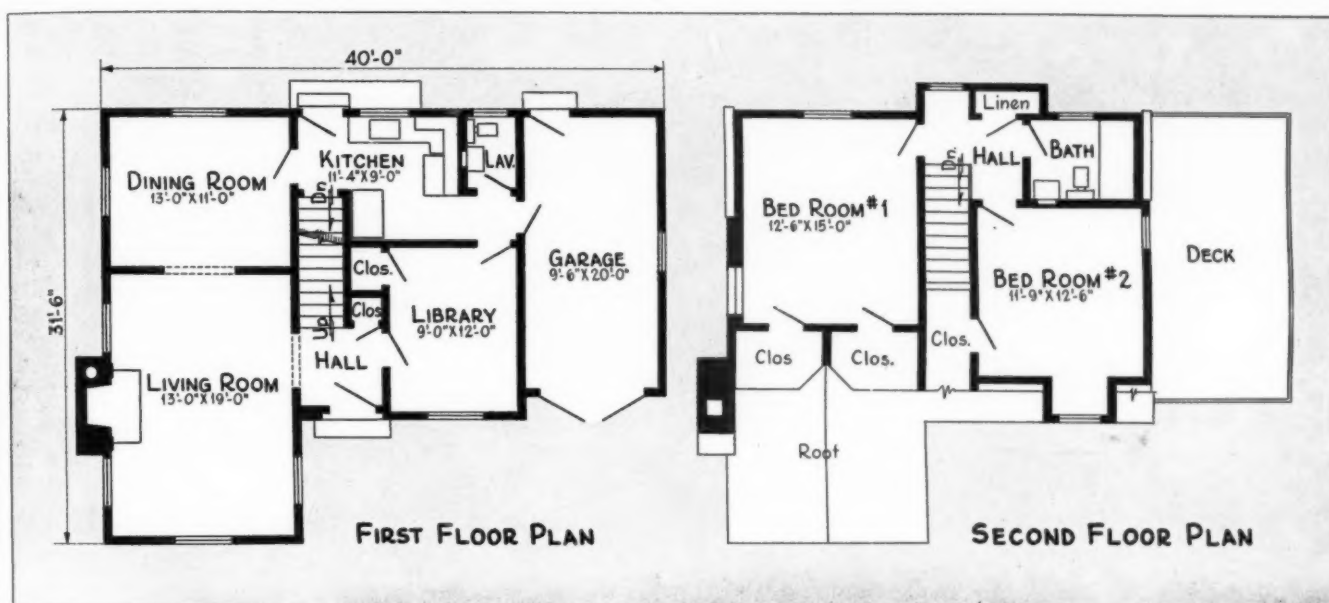


THE two distinctive Colonial designs on these pages are unusually attractive in exterior appearance and carefully planned in interior arrangement. Both have six rooms, attached garage and airing porch above. Rooms throughout are well proportioned and arranged for good ventilation. The living rooms feature natural wood-burning fireplaces with marble mantels. Kitchens are efficient, with double drainboard sinks, hose dish sprays, and abundant cabinet space. Both houses have ample closet space, there being six closets in one and seven in the other; all are papered to match the adjoining rooms. Floors and walls to a height of 3 feet 6 inches in the baths and higher over tubs are finished in colored tile. An extra toilet and lavatory are located on the first floor of each.

CONSTRUCTION features and equipment used in these two houses are as follows: Concrete foundation water-proofed with asphalt emulsion and protected with drain tile around footing; kiln-dried precision lumber used for framing; asphalt shingle roofs; all exterior openings weatherstripped and caulked; copper screens throughout; linoleum floors in kitchens; mirrored doors in baths; clothes chutes from first and second floors; gas-fired winter air conditioning systems; electric outlets and switches generously supplied in all main rooms.



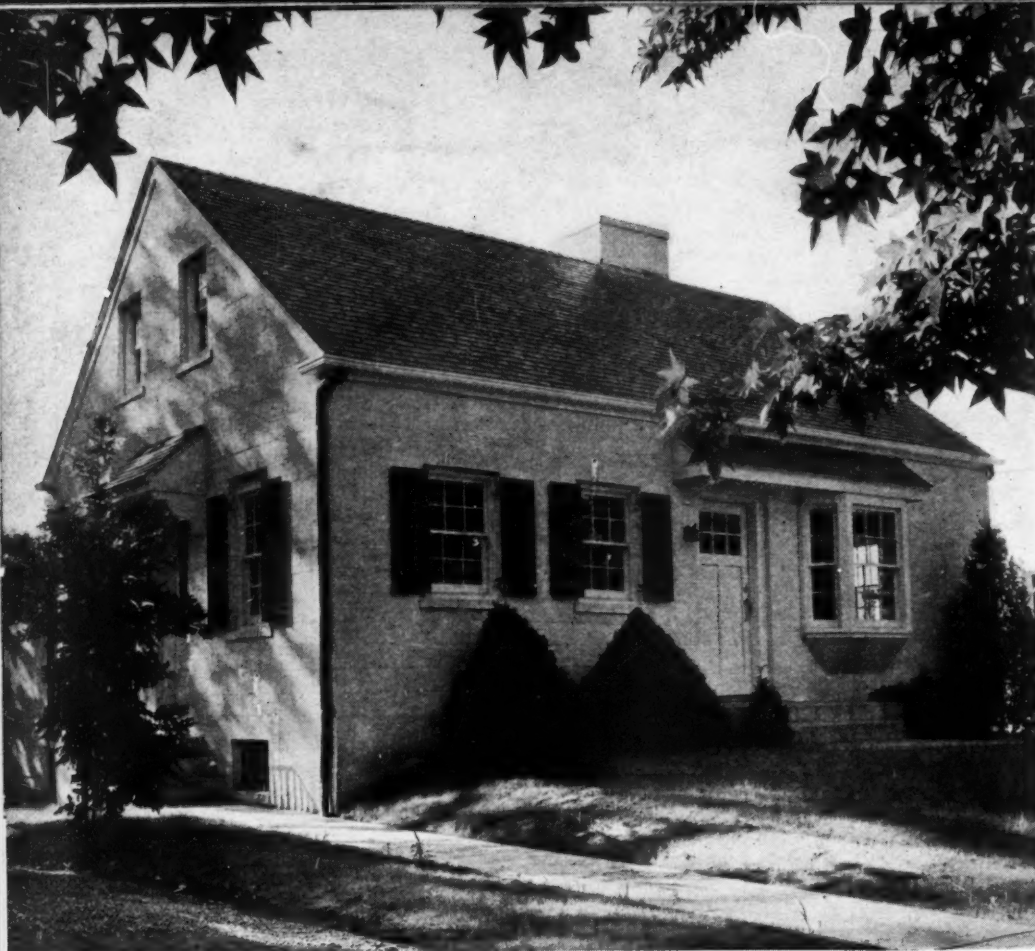
THE weathervaned cupola on the living room wing of this Nantucket Colonial designed and built by Irvin A. Blietz in Evanston, Ill., gives an authentic air to its trim lines. The preliminary perspective sketch at the left indicates fine accuracy in planning and building. Although it has a snug appearance, room sizes are generous. A library off the entrance hall on the first floor can be used as a bedroom; there is easy access to lavatory.



AMERICAN BUILDER  
**True Cost FIGURES**  
FOR THESE HOUSES  
ON PAGE

61





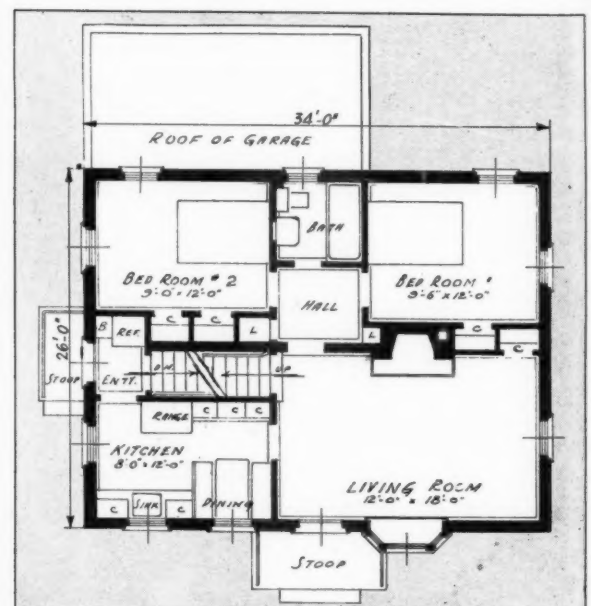
CINDER BLOCK CONCRETE walls with a cement wash exterior are used in this attractive little low-cost, firesafe home in White Plains, N.Y., built by William Reinhardt. The house also has precast joist and concrete slab subfloors. The architect is John T. Simpson of Newark, N.J.

## CONCRETE WALLS, FLOORS



FLOOR PLANS of this economical concrete home show how the entire space is used with a maximum economy. With an overall dimension of approximately  $29\frac{1}{2}' \times 22\frac{1}{2}'$ , Builder Reinhardt has worked in a  $12' \times 18'$  living room, 2 fair-sized bedrooms and bath, a kitchen with dining alcove, and basement and first floor stairs. There is room in the upper portion for 1 large or 2 small bedrooms.

AT LEFT—View of dining room in concrete home at Alden Estates in Portchester, N.Y., showing use of precast concrete second-floor joists.







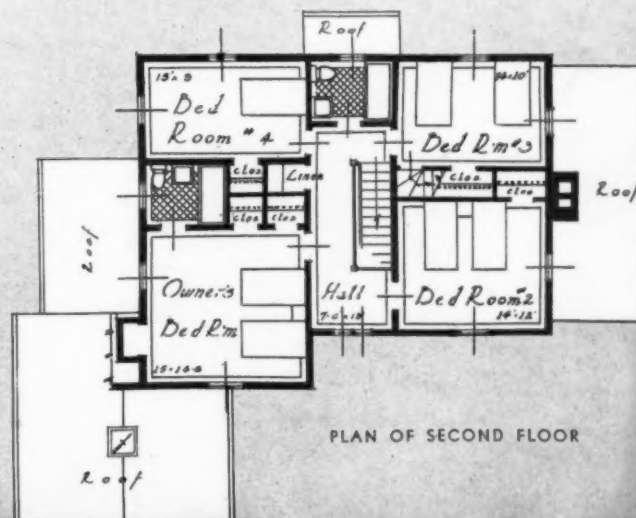
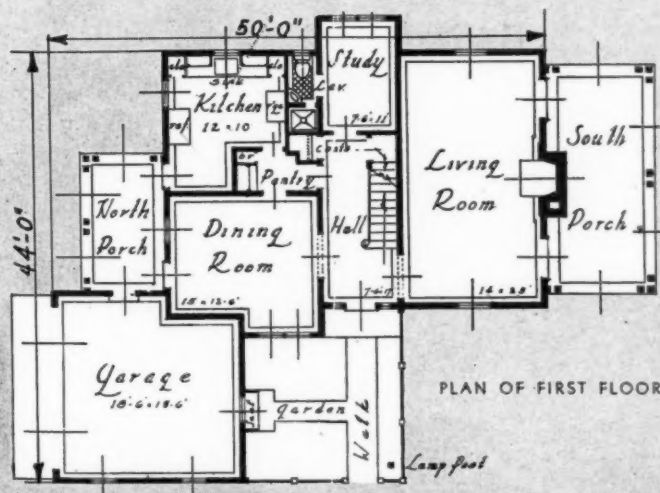
## PLANNED AND BUILT FOR COMFORT LIVING

51



ARCHITECT THEODORE RICHARDS of White Plains, N. Y., has here produced a house with maximum comforts and conveniences—a luxurious house, yet not beyond the reach of the upper middle-class income group. The living room is large and well proportioned, with a southern exposure; pine paneling around fireplace. The study may be used as maid's room and bath. Upstairs is well laid out, spacious.

ONE OF THE FINE FEATURES is the fashion in which the garage has been handled architecturally and the detailing of the picket fence, lamppost and entrance way worked out to lend charm to the approach. House has 4 inches of mineral wool insulation, a 2-pipe vapor system with oil burning furnace.





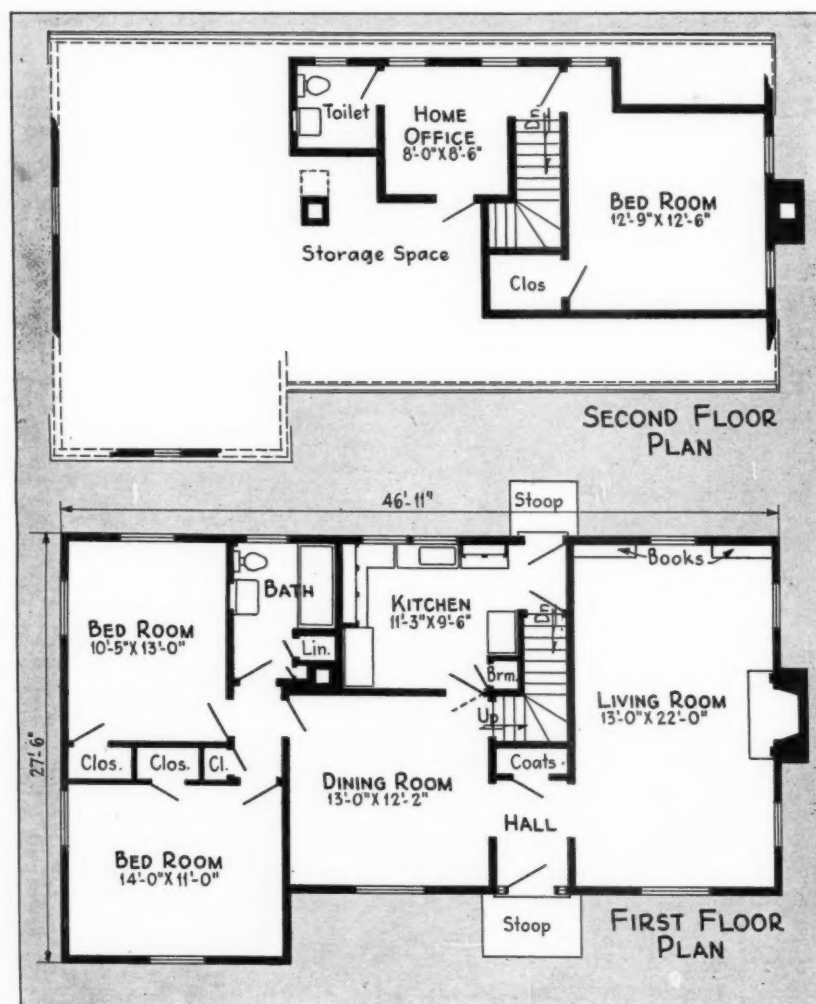
## CORNER LOT COLONIAL FROM THE MIDWEST

Designed and Built by McKay Construction Co., Cedar Rapids, Ia.

PLANNED to fit well on a corner site, this design offers two very attractive elevations facing the street. Living room fireplace chimney on one side balances the extending wing of the front bedroom on the other. Large divided sash in the living and dining room windows flank the front entrance. White siding and red cedar shingles with contrasting blinds are ideally suited to the low lines of the house. A neat cornice with wide fascia and dentil course gives an added note of distinction.

GENEROUS room sizes are found throughout the plan which has a practical first floor layout of five rooms and good provision for storage. Living room is located for plenty of light across one end of house. Hall areas are kept to a minimum, the dining room serving as a traffic avenue to kitchen, bedrooms and second floor where a home office, bedroom and lavatory are finished; balance of second floor is storage area but could be used for another bedroom.

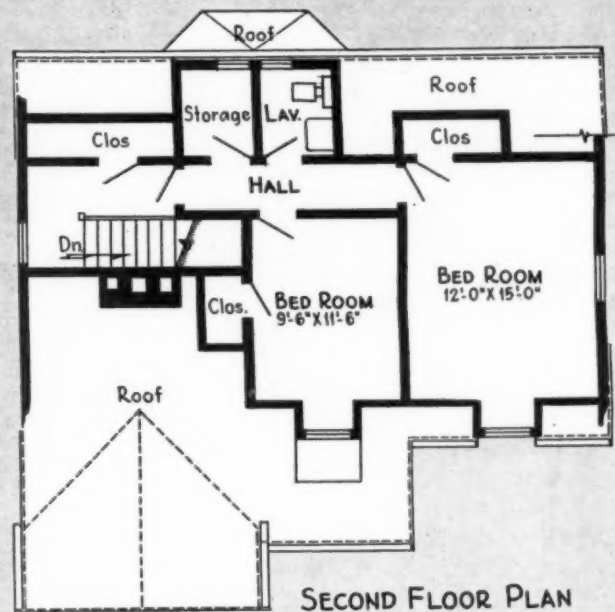
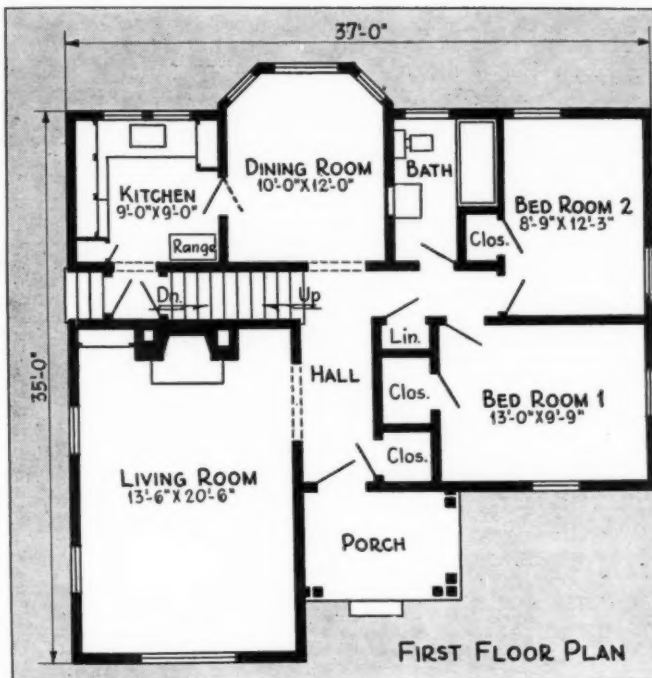
MATERIALS used include Elaterite waterproofing on foundation walls, Northwestern States portland cement, Celotex Mineral wool batts all over, U.S.G. Rocklath for plaster base, Benj. Moore interior paint, National Lead outside paint, Sisalkraft paper on side walls, Bruce hardwood oak flooring, Torrid-Zone furnace, Kohler plumbing fixtures, Overhead garage doors, Corbin hardware.





## 4 BEDROOMS; GOOD PLAN

SOMEWHAT similar to the one opposite, this 7-room Colonial home was built in Cleveland, Ohio, by F. J. Welz and designed by Architect E. Milton MacMillin. It presents another version of a plan which is very popular today—five rooms on first floor and space for two additional rooms and bath above, either completed or to be finished later. Center entrance hall of this well planned house connects with stairs to second floor and all main rooms except compact kitchen which is pictured at right. Construction features include 12" brick and tile foundation walls, yellow pine frame, 10" red cedar siding, variegated asphalt shingle roof, white pine interior trim, select white oak floors throughout, plaster on Rocklath, 4" mineral wool in roof, 24" Moncrief hot-air furnace, Standard plumbing fixtures, copper pipes, rubber floor and linoleum wainscot in bath, rubber-covered counters in kitchen.



AMERICAN BUILDER  
True Cost FIGURES  
FOR THIS HOUSE  
ON PAGE

61





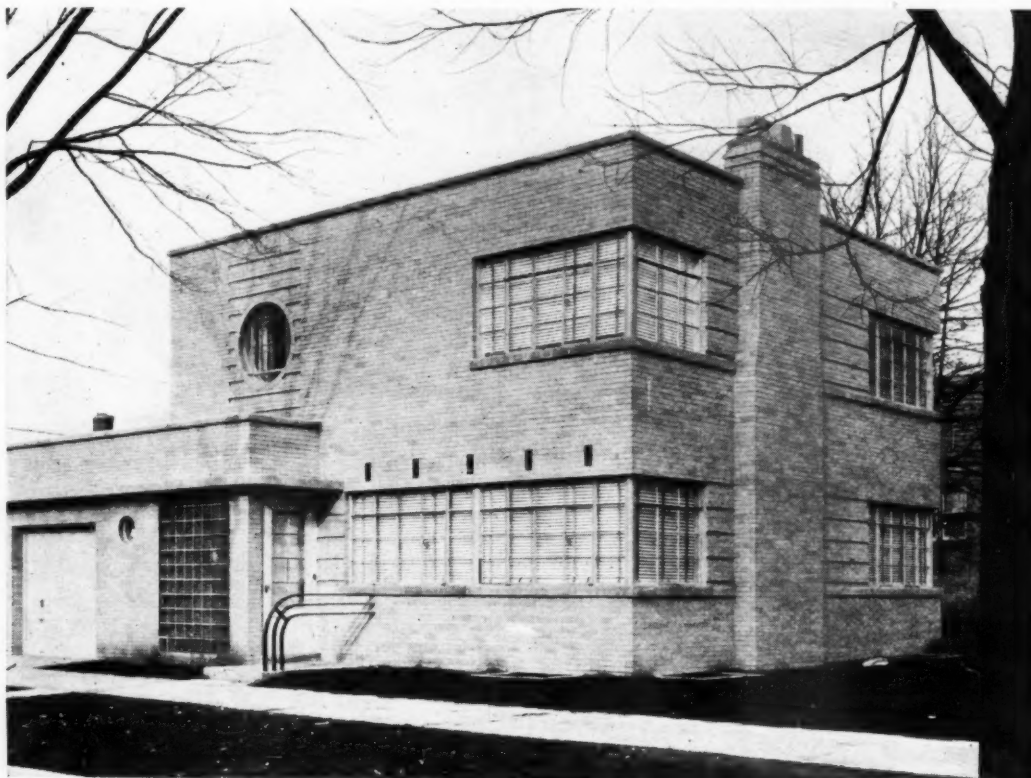
# MODERN CHICAGO HOME FEATURES EXCELLENT DESIGN

**Designed and Built by Rice and Rice of Chicago**

A GOOD deal of contemporary design leaves much to be desired in styling and interior efficiency; this example, however, is excellent in both these considerations. The large expanse of corner windows breaks up the exterior in an interesting pattern; other windows and glass block areas

add to the clean, modern effect which is furthered by the decorative horizontal courses worked into the buff face brick. The plan having 6 rooms, built-in garage and 2½ baths as shown on opposite page is arranged for economy, convenience and comfortable living.

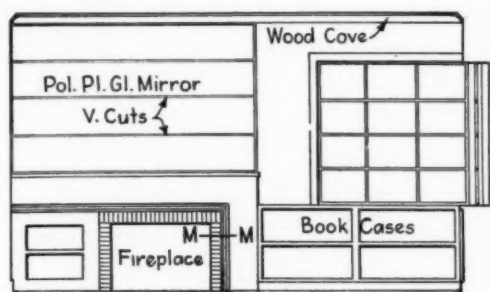
THE soft shades of brick coloring add much of the appeal of this house when it is viewed as at the right; the dark spots over the long Fenestra sash window are red tile inserts. The area of P-C glass block lights the vestibule. Other items of construction are J-M built-up asphalt roof, 3-coat plaster on Rocklath over furring, Balsam-Wool over ceilings, oak floors except Armstrong linoleum in kitchen and baths, A.G.P. gas-fired winter conditioning, Standard plumbing fixtures, Midwest chimes and kitchen ventilating fan, and Lightolier lighting fixtures.



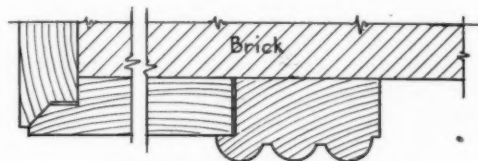
AMERICAN BUILDER  
*The Cost* FIGURES  
FOR THIS HOUSE  
ON PAGE

61

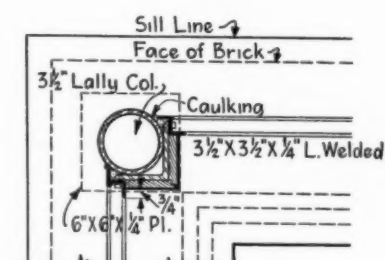
THE garage is nicely designed as a part of the house itself. A rear entrance porch and enclosed solarium located behind it and the deck above, partly covered and overlooking the rear yard, provide spots for summer relaxation.



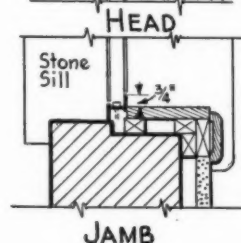
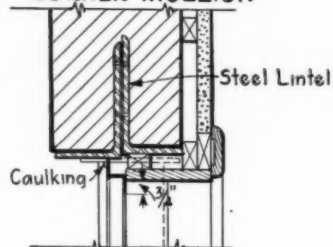
FIREPLACE AND BOOKCASE DETAILS



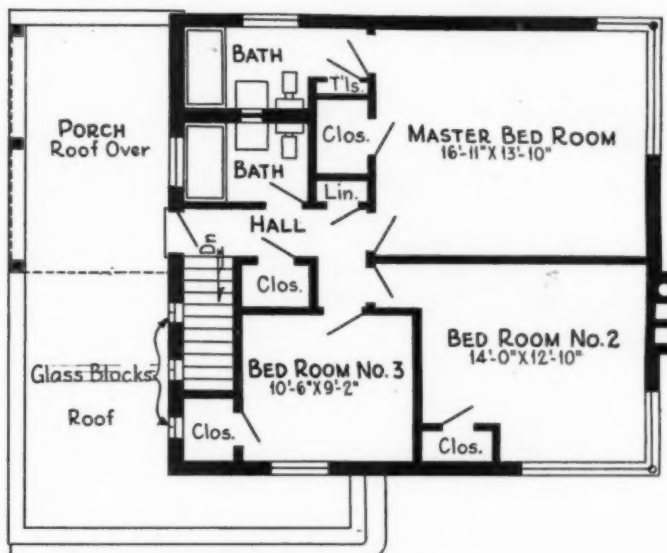
DETAIL AT M-M



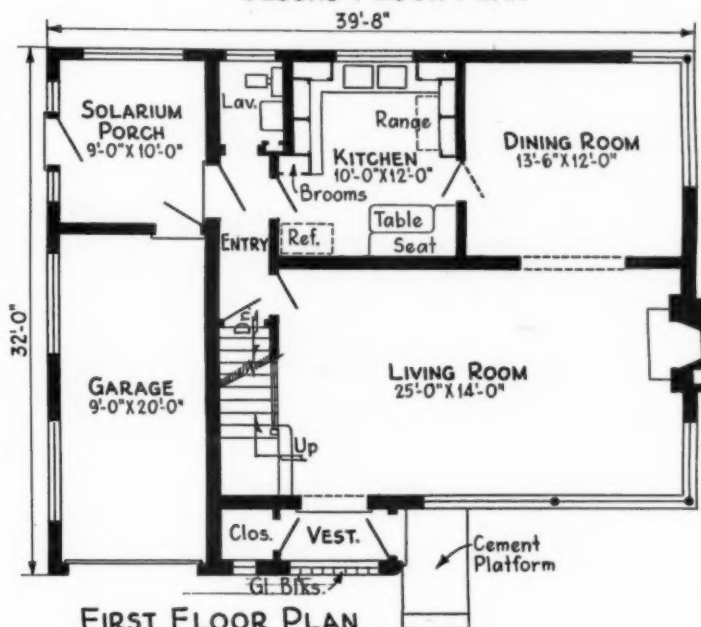
CORNER MULLION



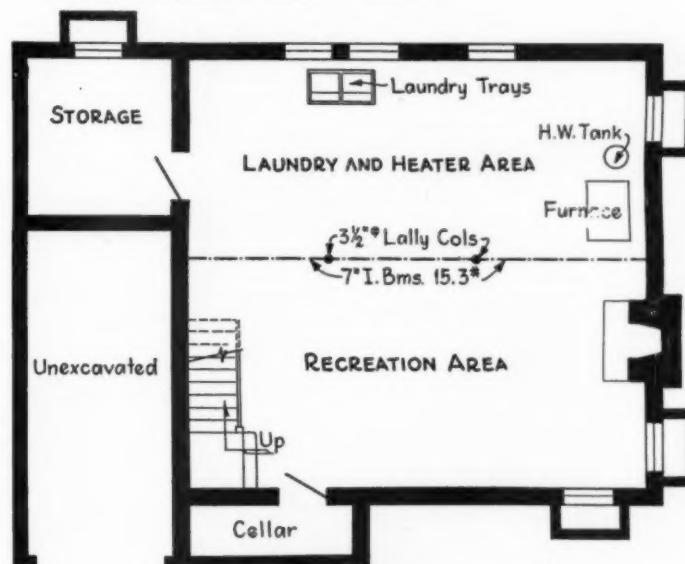
PLANS AND DETAILS of this Rice and Rice modern home in Chicago show numerous planning and construction highlights. The basement recreation area has a wood-burning fireplace; service equipment is grouped on the other side. Living room is flooded with light from the large corner window, a detail of which is shown. Fireplace wall is also detailed to indicate modern treatment of V-cut, flesh tinted mantel mirror and the adjoining cases; note simple trim and moulds. Economy is found in hall sizes, bath and plumbing placement, and efficient space use.



SECOND FLOOR PLAN



FIRST FLOOR PLAN



BASEMENT PLAN



## 7-ROOM "ORCHARD HOUSE" BEARS MISSISSIPPI HONORS

BESIDES being well planned and built, this home in Jackson, Miss., bears the added distinction of being the first in its state and among the first in the country to be granted a 90 per cent FHA insured mortgage. Architect-Owner Henry G. Markel decided to built his new home as a demonstration house to stimulate the erection of better homes.

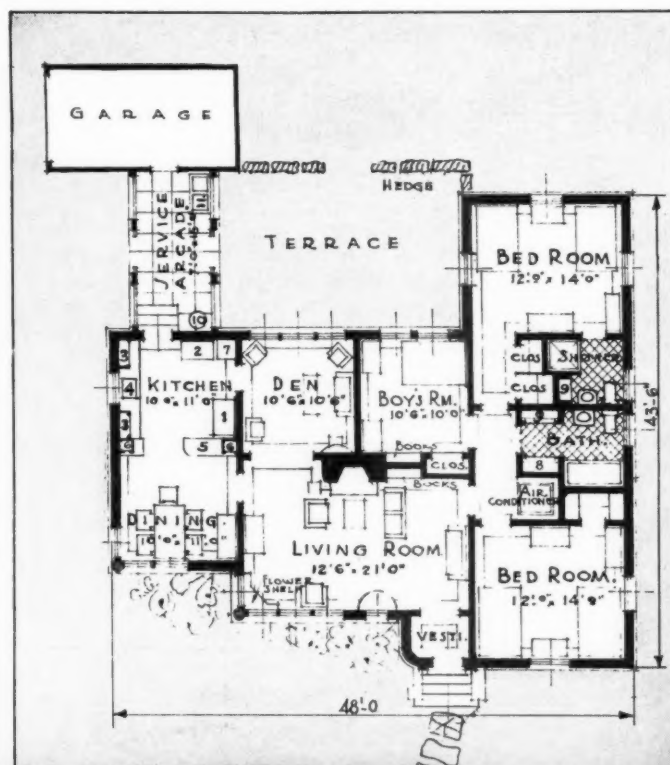
The dwelling, named "Orchard House" because of its site location in a pecan orchard, utilizes the greatest proportion of usable floor area in relation to the gross area. In plan, conservative modern design, and use of materials, the architect-owner has kept in mind the four essentials—durability, livability, functional efficiency, and architectural attractiveness.

This 7-room house has a semi-detached garage connected to the main building by an attractive arcade used as a

service area and laundry. The living room has corner windows and a flower shelf with magazine racks under it. A cast stone fireplace is surrounded by a wall finished in Flexwood and mirror directly over the mantel, as seen below. The dining room and kitchen form a single, compact unit. Bedrooms are planned with particular reference to placing of furniture, natural lighting and ventilation, and are provided with roomy closets.

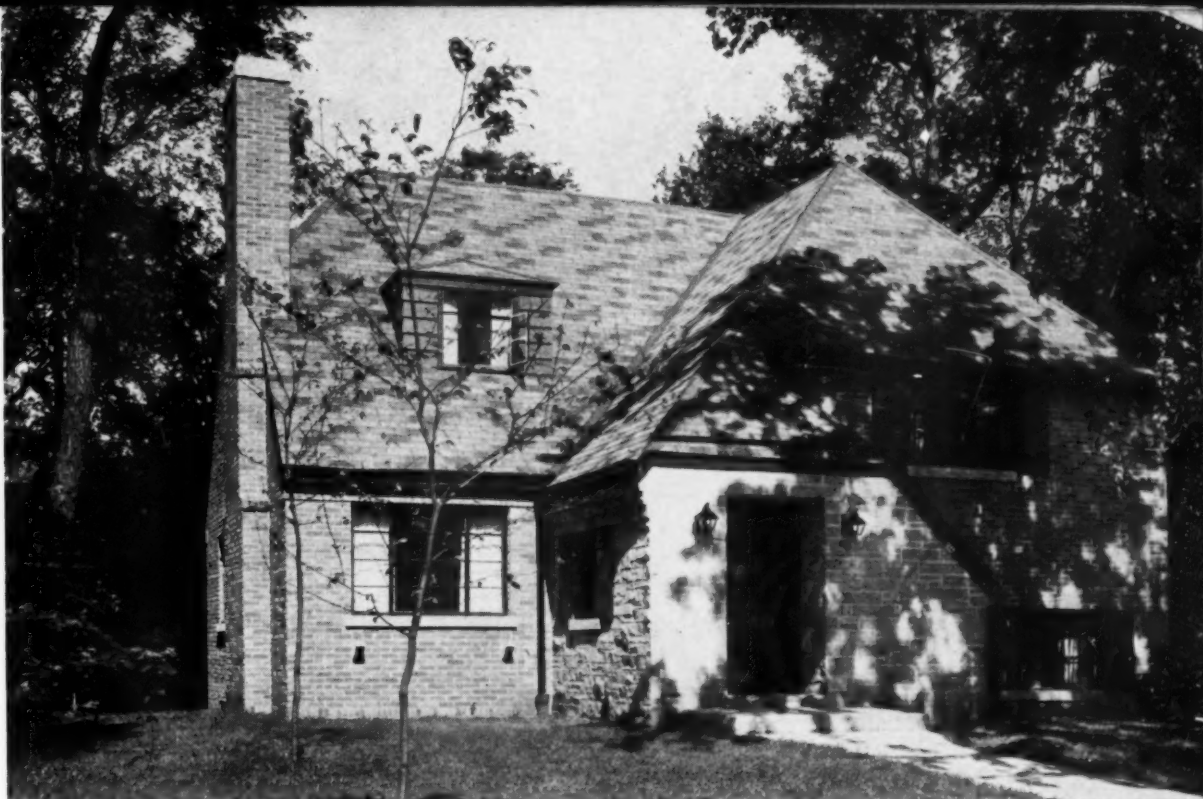
Construction and equipment features include: Concrete footings; brick veneer over Vapor-seal covered framing; No. 1 common yellow pine sills and joists creasoted against termites; cypress sills and sash; living room and den floors Bruce block floors No. 1 clear red oak; Sealex linoleum in kitchen; Ludowici-Celadon interlocking shingle tile; Standard plumbing fixtures; gas-fired winter air conditioning; Weis shower stall; Fenestra steel sash; Acme Metal kitchen cabinets; plastering on perforated Rocklath; Sherwin-Williams paint; Corbin hardware; Marlite wainscot and tile wainscot and floors in baths; numerous outlets for electricity, radio and telephone.

56





THE English type exterior of this 5-level design as built in Park Ridge, Ill., is done in hard burned clinker brick with stone ashlar entrance and trim. Roof is Bird's Weathertex asphalt shingles. Precision kiln-dried lumber, metal-lated rock lath plaster base and Balsam-Wool insulation were used. Equipment included U. S. Radiator one-pipe, forced-circulation hot water system with recessed convector type radiators, Weil-McLain plumbing fixtures, Schlage hardware, St. Charles metal cases and Congoleum linoleum floor and walls in kitchen.



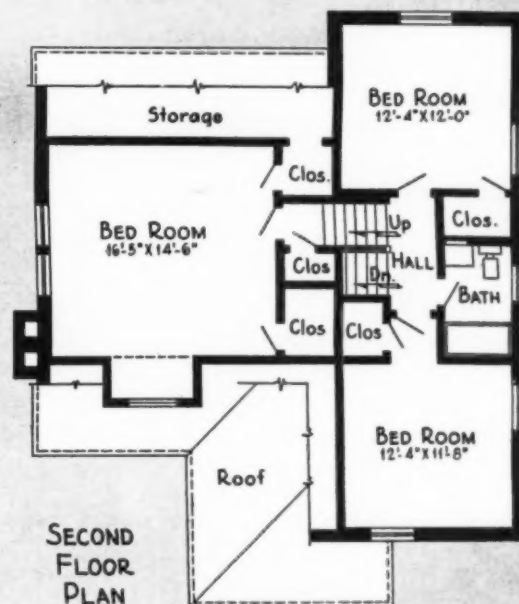
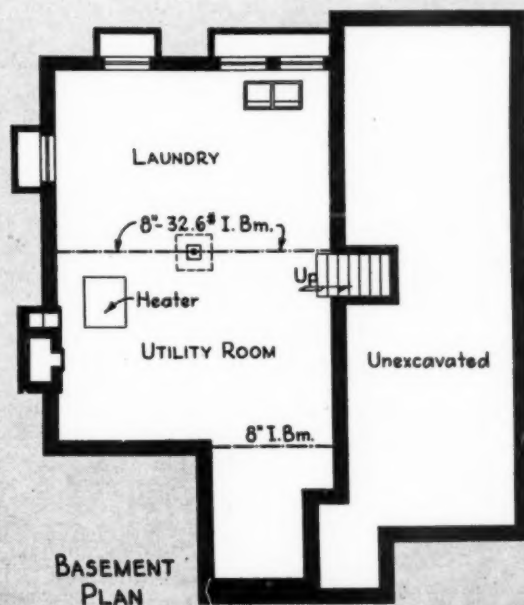
## 5-LEVEL HOUSE IN ILLINOIS CONTAINS 8 ROOMS, 1½ BATHS

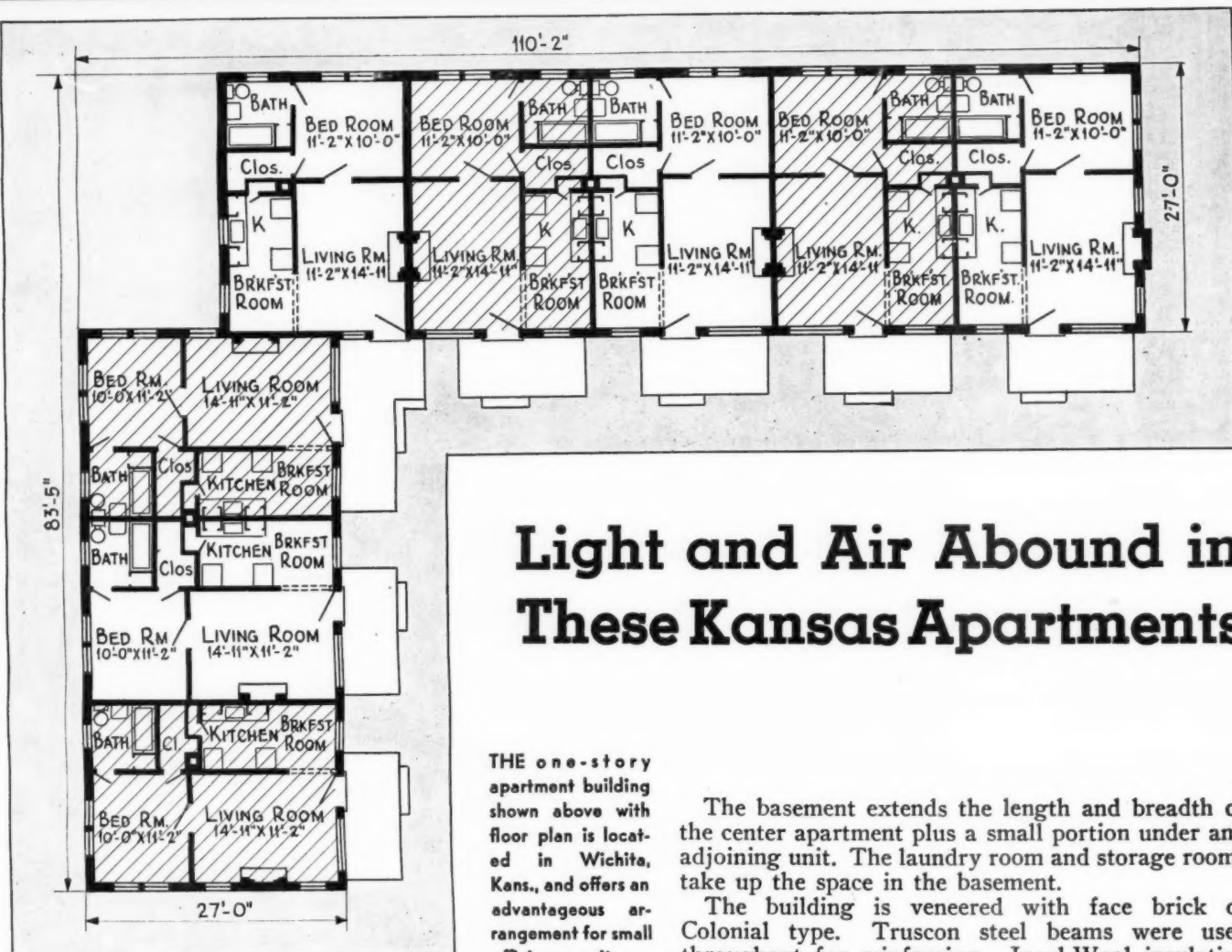
THE PRACTICAL advantages and convenience of staggered, multi-level house plans are again appealing to the public. During the past year, the economy of excavation and space utilization have proven added factors in this increased popularity. The 5-level plan of the house shown above which was built by Fred J. Walsh, Chicago, and designed by that firm's staff architect, Martin H. Braun, offers a good layout of 8 rooms and 1½ baths. Compactness and economy are evident when this roomy plan is compared to the exterior pictured above. The possibility of adapting this type of plan to a wide range of individual needs is also to be considered—maid and play room level could be used instead as a single, large recreation area; lower basement level could be omitted and a garage and utility room placed on the grade level; upper bedroom level might be left for later finishing. Because of the irregularity of window placement, several of the more picturesque exterior styles of architecture can be used.

AMERICAN BUILDER  
**True Cost FIGURES**  
FOR THESE HOUSES  
ON PAGE

61

PLANS at right show laundry and heating system on basement level a half-flight of stairs below the grade level on which maid's room, lavatory and play room are located. Living room, dining room and efficient U-shaped kitchen are at front entrance level. An 8-riser stair out of living room leads to the bath and two bedrooms; third bedroom is on top level.





## Light and Air Abound in These Kansas Apartments

THE one-story apartment building shown above with floor plan is located in Wichita, Kans., and offers an advantageous arrangement for small efficiency units.

**T**HE Colonial Terrace Apartment House in Wichita, Kans., is an L-shaped building designed and constructed by A. N. Bontz & Son, Wichita building contractors, to house eight families. It is located on the lots so that there is a large lawn with shrubbery in front of the apartments to give a large open court with a homelike atmosphere and space to assure sunlight and ventilation for all of the apartment units.

There are four different layouts for these apartments with only two apartments of each design. Each apartment has a living room, a bedroom, kitchen and dinette. Living rooms have wood and tile mantels and fireplaces. Kitchens are equipped with gas range, electric refrigerator, built-in cabinets and sinks. Sealex linoleum is used on the floors and cabinet tops. There are hardwood floors throughout. Walls are covered with Imperial washable wallpapers.

The basement extends the length and breadth of the center apartment plus a small portion under and adjoining unit. The laundry room and storage rooms take up the space in the basement.

The building is veneered with face brick of Colonial type. Truscon steel beams were used throughout for reinforcing. Insul-Wool insulation and Gold Bond plaster and plaster base were used in the walls. The door and window openings are thoroughly weatherstripped and caulked.

All plumbing fixtures in the building are from the Crane Company. A fire wall in the center of the building between apartments four and five and a fire coping on the roof were required by the city code.

Each apartment has a Coleman gas floor furnace made by the Coleman Lamp and Stove Company of Wichita. All wiring of the building was done according to the adequate wiring code of the General Electric Company. Corbin hardware was used throughout the building.

At the back of the apartments there are eight garages finished with drop siding walls and sliding doors. Inside, the floors and ceilings are unfinished and the floors are of gravel. Red cedar shingles were used for roofing of the garages as well as the apartment house.

# INDEX TO 1938 HOUSE DESIGNS AND PLANS

ALL HOUSE DESIGNS AND FLOOR PLANS published in the AMERICAN BUILDER during the year 1938 and in Jan. '39 are listed and classified in this index. Date and page number on which each house appears are given opposite name of type, such as Colonial, English, Spanish, etc.

## 1 STORY HOUSES—

- 3 ROOM— { COLONIAL—Jan. '39, p. 36.  
LOW COST—Aug., p. 32.
- 4 ROOM— { COTTAGE—June, p. 60.  
COLONIAL—Feb., p. 63; May, pp. 42, 43, 44; Jan. '39, p. 37.  
LOW COST—May, p. 42, 43, 44, 55; June, p. 63; Aug., pp. 32, 33, 35; Jan. '39, p. 50.
- 5 ROOM— { COTTAGE—Mar., p. 71; June, p. 58; July, p. 45; Nov., p. 51.  
COLONIAL—Feb., p. 66; May, p. 50; Sept., p. 56; Jan. '39, pp. 32, 39.  
CALIFORNIA—Sept., p. 48.  
MODERN—May, p. 50; June, p. 64; July, p. 39.  
LOW COST—Mar., p. 65; June, p. 63; July, p. 61; Sept., p. 47; Oct., pp. 17, 22, 23, 25.
- 6 ROOM— { CALIFORNIA—Oct., p. 18; Jan. '39, p. 43.  
SPANISH—May, p. 47.  
LOW COST—Aug., p. 33.
- 7 ROOM— { COLONIAL—Jan. '39, p. 56.  
CALIFORNIA—June, p. 65.
- 8 OR MORE ROOMS— { CALIFORNIA—July, p. 44.

## 1½ STORY HOUSES—

- 5 ROOM— { COTTAGE—Mar., p. 71; June, pp. 52, 61.  
COLONIAL—May, p. 49; June, p. 70; July, pp. 45, 51; Aug., pp. 41, 45; Sept., pp. 42, 57; Nov., pp. 46, 47, 48.  
LOW COST—May, p. 54; Dec., p. 73.
- 6 ROOM— { COTTAGE—June, p. 59.  
COLONIAL—Feb., pp. 55, 58, 67; May, p. 57; June, p. 54; Aug., pp. 38, 42; Sept., pp. 42, 43, 45; Dec., p. 41; Jan. '39, pp. 38, 40, 41, 44, 47, 49.  
FRENCH—June, p. 57.  
ENGLISH—Aug., p. 43.
- 7 ROOM— { COLONIAL—Apr., p. 65; Dec., p. 40; Jan. '39, pp. 52, 53.  
ENGLISH—May, p. 52.
- 8 OR MORE ROOMS— { COLONIAL—Feb., p. 61; July, p. 43; Sept., p. 46; Dec., p. 38.  
ENGLISH—Jan. '39, p. 57.

## 2 STORY HOUSES—

- 5 ROOM— { COLONIAL—Apr., p. 62; July, p. 47.  
MODERN—Apr., p. 63.  
LOW COST—Aug., p. 34.
- 6 ROOM— { COLONIAL—Feb., pp. 62, 64, 68; Apr., pp. 60, 68, 71; June, p. 66; July, p. 48; Aug., pp. 31, 40; Sept., pp. 52, 54; Oct., pp. 15, 27, 104; Nov., pp. 36, 43, 44, 49; Dec., p. 36; Jan. '39, p. 48.  
ENGLISH—Sept., p. 54; Oct., p. 19.  
MODERN—Apr., p. 67; Oct., p. 21; Jan. '39, p. 55.  
LOW COST—Aug., pp. 34, 35.
- 7 ROOM— { COLONIAL—Feb., pp. 69, 73; May, p. 51; July, p. 38; Sept., pp. 50, 55; Nov., pp. 37, 38, 42.  
ENGLISH—Sept., p. 51; Nov., p. 39.  
FRENCH—June, p. 57; Sept., p. 49; Dec., p. 37.  
MODERN—Apr., p. 72; Nov., p. 41.
- 8 OR MORE ROOMS— { COLONIAL—Feb., p. 60; Oct., p. 111; Dec., p. 60; Jan. '39, pp. 46, 51.  
ENGLISH—May, p. 46.  
MODERN—Jan. '39, p. 33.

## MISCELLANEOUS DESIGN—

- { Apartments—Feb., pp. 48, 49, 70, 71; Apr., pp. 73, 75; May, p. 69; June, pp. 49, 50; Aug., p. 57; Nov., p. 54; Jan. '39, p. 58. Bank—Feb., p. 52. Offices—June, pp. 72, 73; Sept., p. 64. Recreation House—June, p. 53. Row House—July, p. 54. Service Station—June, p. 75. Tourist Cottages—Feb., p. 80. Two-Family Houses—May, p. 58; Aug., p. 47.



# ProCost

## Figures for American Builder Homes

HOME DESIGNS ON PAGES AS NUMBERED

Unit of Construction	Jan., 32	Jan., 33	Jan. 36	Jan., 37	Jan. 38	Jan., 39
Basement Walls, lin. ft.	...	0	124	138	134	154
Trench Walls, lin. ft.	295	278	0	0	0	104
Basement Floor, sq. ft.	...	0	706	925	922	1274
Garage Floor, sq. ft.	380	400	0	0	(c)	240
Excavation per ft. deep, cu. yds.	...	20	31	30	39	61
HoltRate on following items	1.936	3.150	.806	1.012	1.494	1.620
Outside Walls, squares	26.7	40.9	12.8	14.1	19.2	24.7
First Floor, squares	10.4	16.1	7.1	9.3	9.3	12.7
Second Floor, with Fin. Flg., sqs.	2.0	13.1	0	0	6.1	0
Second Floor, without Fin. Flg., sqs.	1.8	0	0	0	3.1	0
Ceiling, sqs.	14.2	20.1	7.1	9.3	9.3	12.7
Roof Pitch, inches rise per ft. run	12"	5"	6"	6"	12"	10"
Roof, squares	22.9	25.2	8.6	11.3	14.4	20.7
Hips and Valleys, lin. ft.	50	184	22	20	10	50
Cornice, type and lin. ft.	C & F-320	12"-228	C & F-134	C & F-148	C & F-226	C & F-278
Cornice, type and lin. ft.	0	24"-46	0	0	0	0
Partition, lin. ft.	204	393	78	125	174	173
Inside Finish OS Walls, lin. ft.	277	440	124	138	190	(d)152
Front and OS French Doors, opgs.	4	7	1	1	3	3
Rear and Grade Doors, opgs.	1	1	1	1	1	2
Garage Doors 8' wide	2	2	0	0	(c)	1
Inside Doors and Cased Opgs., opgs.	22	36	6	11	17	12
Windows and Casements, opgs.	20	35	11	13	21	13
Gable Sash and Louvers, opgs.	2	0	0	0	0	4
Chimney, lin. ft.	24	30	23	24	32	30
Main Stairs	1	1	0	0	1	0
Porch Floor, sqs.	1.2	1.3	0	0	(c)	2.1
Porch Ceiling, sqs.	.6	1.3	0	0	(c)	2.1
Porch Beam, lin. ft.	16	23	0	0	(c)	48
Porch and Balcony Post and Newels, number	1	1	0	0	(c)	2
Porch Roof, sqs.	.7	1.6	0	0	(c)	2.5
Porch Cornice, lin. ft.	17	25	0	0	(c)	50
Porch and Deck Rail, lin. ft.	8	60	0	0	(c)	0

## HOME DESIGNS FOR PAGES AS NUMBERED

Unit of Construction	Jan., 40	Jan., 41	Jan., 43	Jan., 45	Jan., 46
Basement Walls, lin. ft.	109	108	173	104	157
Trench Walls, lin. ft.	58	60	0	66	42
Basement Floor, sq. ft.	720	710	1356	675	940
Garage Floor, sq. ft.	180	180	0	190	400
Excavation per ft. deep, cu. yds.	35	35	55	34	44
HoltRate on following items	1.541	1.604	1.438	1.570	2.484
Outside Walls, squares	20.8	23.5	19.3	19.6	33.5
First Floor, squares	7.2	7.1	13.6	6.8	9.4
Second Floor, with Fin. Flg., sqs.	7.3	7.1	0	6.3	8.4
Second Floor, without Fin. Flg., sqs.	0	.3	0	2.4	0
Ceiling, sqs.	9.1	9.2	13.6	8.7	13.4
Roof Pitch, inches rise per ft. run	14"	14"	7"	7"-20"	7"
Roof, squares	17.1	16.1	17.2	16.9	16.8
Hips and Valleys, lin. ft.	48	32	24	30	0
Cornice, type and lin. ft.	C & F-166	8"-206	8"-203	C & F-278	C & F-236
Cornice, type and lin. ft.	8"-44	C & F-48	0	24"-36	0
Partition, lin. ft.	182	174	173	164	332
Inside Finish OS Walls, lin. ft.	238	260	173	195	354
Front and OS French Doors, opgs.	1	2	1	3	8
Rear and Grade Doors, opgs.	1	1	1	1	1
Garage Doors 8' wide	1	1	0	1	2
Inside Doors and Cased Opgs., opgs.	15	15	14	14	34
Windows and Casements, opgs.	15	15	22	17	37
Gable Sash and Louvers, opgs.	0	2	2	2	0
Chimney, lin. ft.	34	33	28	34	36
Main Stairs	1	1	0	1	1
Porch Floor, sqs.	1.1	1.0	0	.9	0
Porch Ceiling, sqs.	1.1	1.0	0	.9	0
Porch Beam, lin. ft.	30	26	0	27	0
Porch and Balcony Post and Newels, number	4	3	0	4	1
Porch Roof, sqs.	(a)	(a)	0	1.1	0
Porch Cornice, lin. ft.	(a)	(a)	0	31	0
Porch and Deck Rail, lin. ft.	0	0	0	0	22

(a)—Included with main roof and cornice.

(c)—Not including garage and pergola leading thereto.

(d)—Garage unfinished inside.

## Necessary Home Equipment, Fixtures, Accessories, Extras

Since the above surveyed items cover only the actual superstructure of the house, you should figure and add the following items as specified or wanted (and don't forget Overhead and Profit):

Areaways, Cellar Sash, Coal Chute, Basement Partitions & Doors, Attic Flooring, Attic Stairs, Blinds, Gutters & Downspouts, Fireplaces,

Built-in Cabinets, Rail & Newels for Stairs and Stair Well, Beamed Ceiling, Weatherstrips, Tile Work, Plumbing, Heating & Air Conditioning, Lighting, Terraces, Patio Walls or Fences, Sidewalks including Porch Steps, Driveways, Unattached Garages. Also add for painting and decorating if not included in Unit Costs.

# ProCost

## Figures for American Builder Homes

HOME DESIGNS ON PAGES AS NUMBERED

Unit of Construction	Jan., 47	Jan., 48	Jan., 49	Jan. 50	Jan., 51
Basement Walls, lin. ft.	132	120	123	120	138
Trench Walls, lin. ft.	48	44	41	0	108
Basement Floor, sq. ft.	720	785	901	884	1078
Garage Floor, sq. ft.	190	246	210	0	356
Excavation per ft. deep, cu. yds.	31	37	41	38	53
HoltRate on following items	1.430	1.724	1.602	1.062	2.475
Outside Walls, squares	19.6	25.3	20.5	16.1	29.2
First Floor, squares	7.2	7.8	9.0	8.8	10.8
Second Floor, with Fin. Flg., sqs.	5.2	8.3	8.4	0	10.9
Second Floor, without Fin. Flg., sqs.	1.7	0	.8	0	0
Ceiling, sqs.	9.1	10.7	10.7	8.8	14.6
Roof Pitch, inches rise per ft. run	12"	9"	9"	10"	10"
Roof, squares	14.4	13.9	13.7	12.9	20.6
Hips and Valleys, lin. ft.	0	26	34	0	56
Cornice, type and lin. ft.	C & F-174	C & F-204	C & F-240	C & F-70	C & F-234
Cornice, type and lin. ft.	18"-30	0	0	8"-70	0
Partition, lin. ft.	146	190	194	124	266
Inside Finish OS Walls, lin. ft.	215	262	222	120	328
Front and OS French Doors, opgs.	2	3	3	1	6
Rear and Grade Doors, opgs.	2	2	2	1	2
Garage Doors 8' wide	1	1	1	0	2
Inside Doors and Cased Opgs., opgs.	13	17	17	12	21
Windows and Casements, opgs.	18	17	14	13	27
Gable Sash and Louvers, opgs.	1	0	0	4	3
Chimney, lin. ft.	30	36	32	30	38
Main Stairs	1	1	1	0	1
Porch Floor, sqs.	0	0	0	0	3.2
Porch Ceiling, sqs.	0	0	0	0	3.2
Porch Beam, lin. ft.	0	0	0	0	62
Porch and Balcony Post and Newels, number	0	0	0	0	19
Porch Roof, sqs.	0	0	0	0	4.1
Porch Cornice, lin. ft.	0	0	0	0	66
Porch and Deck Rail, lin. ft.	0	45	41	0	0

HOME DESIGNS ON PAGES AS NUMBERED

Unit of Construction	Jan., 52	Jan., 53	Jan., 54	Jan., 56	Jan., 57
Basement Walls, lin. ft.	149	148	116	0	120
Trench Walls, lin. ft.	0	17	74	183	73
Basement Floor, sq. ft.	1148	1078	890	0	1236
Garage Floor, sq. ft.	0	0	203	(e)	0
Excavation per ft. deep, cu. yds.	48	47	42	15	55
HoltRate on following items	1.580	1.620	0	1.460	1.720
Outside Walls, squares	19.6	19.7	28.3	17.4	20.4
First Floor, squares	11.5	10.8	8.9	15.0	7.1
Second Floor, with Fin. Flg., sqs.	4.1	5.2	8.4	0	8.6
Second Floor, without Fin. Flg., sqs.	7.4	3.7	0	0	3.7
Ceiling, sqs.	5.5	10.8	10.9	15.0	12.4
Roof Pitch, inches rise per ft. run	12"	12"	3/4"	8"	13"
Roof, squares	17.3	16.6	12.1	18.8	19.7
Hips and Valleys, lin. ft.	60	70	0	160	162
Cornice, type and lin. ft.	C & F-180	C & F-246	0	8"-190	C & F-180
Cornice, type and lin. ft.	0	0	0	0	0
Partition, lin. ft.	177	201	246	170	200
Inside Finish OS Walls, lin. ft.	192	200	259	183	242
Front and OS French Doors, opgs.	1	1	2	1	1
Rear and Grade Doors, opgs.	1	1	1	1	1
Garage Doors 8' wide	0	0	1	(e)	0
Inside Doors and Cased Opgs., opgs.	18	17	21	13	18
Windows and Casements, opgs.	20	18	(b)	21	21
Gable Sash and Louvers, opgs.	2	0	0	0	0
Chimney, lin. ft.	32	32	30	20	32
Main Stairs	1	1	0	0	1
Porch Floor, sqs.	0	.7	1.1	(c)	0
Porch Ceiling, sqs.	0	.7	2.7	(e)	0
Porch Beam, lin. ft.	0	17	36	(e)	0
Porch and Balcony Post and Newels, numbers	0	5	3	(e)	0
Porch Roof, sqs.	0	.9	1.6	(e)	0
Porch Cornice, lin. ft.	0	18	36	(e)	0
Porch and Deck Rail, lin. ft.	0	0	0	(e)	0

(b)—Omitted in HoltRate on account of being so special.

(c)—Not including garage and pergola leading thereto.

## Necessary Home Equipment, Fixtures, Accessories, Extras

Since the above surveyed items cover only the actual superstructure of the house, you should figure and add the following items as specified or wanted (and don't forget Overhead and Profit):

Areaways, Cellar Sash, Coal Chute, Basement Partitions & Doors, Attic Flooring, Attic Stairs, Blinds, Gutters & Downspouts, Fireplaces,

Built-in Cabinets, Rail & Newels for Stairs and Stair Well, Beamed Ceiling, Weatherstrips, Tile Work, Plumbing, Heating & Air Conditioning, Lighting, Terraces, Patio Walks or Fences, Sidewalks including Porch Steps, Driveways, Unattached Garages. Also add for painting and decorating if not included in Unit Costs.

# Portfolio of Architectural Plates of DOUGLAS FIR PLYWOOD PANELING

PREPARED BY CARL F. GOULD, F.A.I.A.

The second of a series intended as suggestions to the builder and architect as possible ways of applying Douglas Fir Plywood as decorative panels in modern home and shop design.

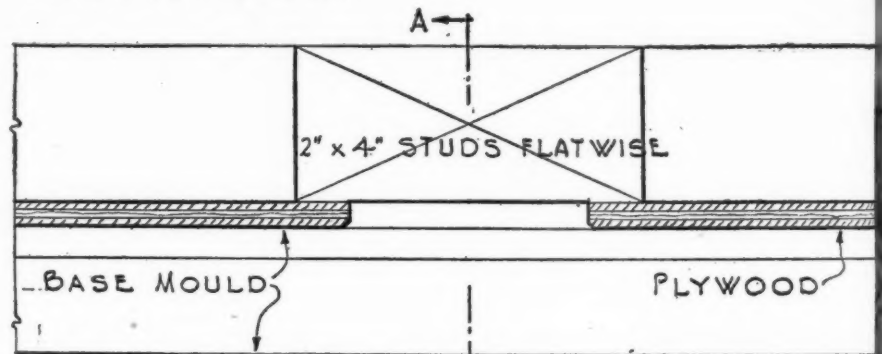
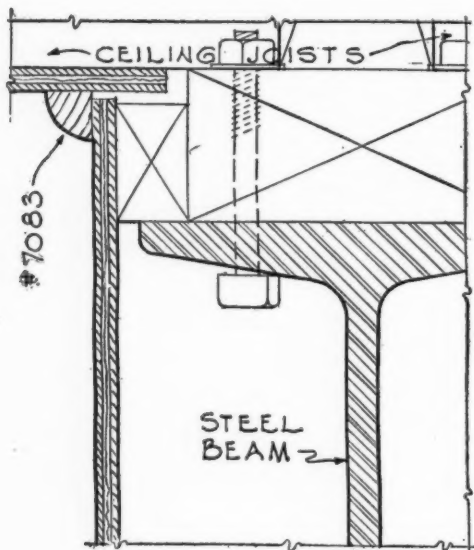
THE drawings on these two pages indicate a simple form of effective treatment for a recreation room, and a finished attic room. In the recreation room, the Douglas fir plywood panels are shown installed vertically, and exactly spaced on sized and surfaced studding, to give the effect of wide shallow recessed joints. The details below exhibit a method of boxing in a steel floor beam to avoid any apparent incongruities. The plywood installation in the attic demonstrates the adaptability of plywood in making the various intersections of sloping roofs and dormers. Both of these rooms would appear to advantage

if finished with a silver gray penetrating oil stain.

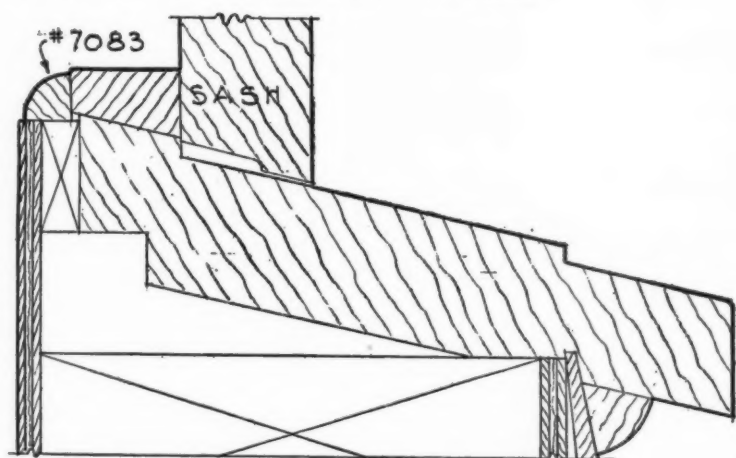
MATERIALS: The panels are a wallboard grade of Douglas fir plywood,  $\frac{1}{4}$ " or  $\frac{3}{8}$ " thick. For basement rooms, it may be advisable to use an asphalt paint on the back of the plywood, if the masonry walls are damp. Furring strips are desirable, except for stud walls. In the attic, if condensation may be a factor in walls and roofs, the Douglas fir plywood can be made to serve as an effective moisture or vapor barrier by painting the backs of the panels with 2 coats of asphalt paint. Numbers in details refer to Standard Wood Mouldings, 7000 Series.

## DETAILS

SCALE  $\frac{1}{2}$  FULL SIZE



## PLAN THROUGH WALL



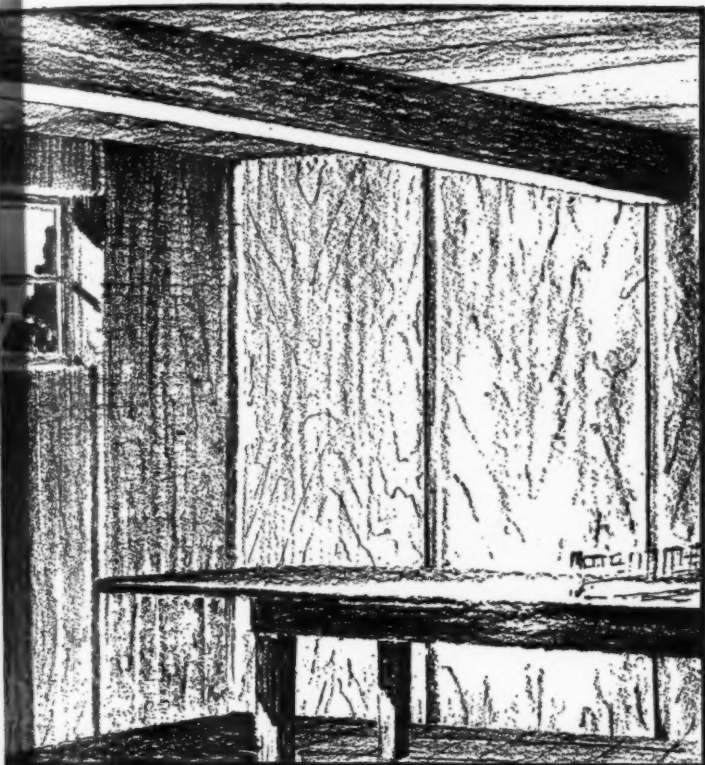
## SECTION THROUGH WINDOW SILL

DETAILS OF RECREATION ROOM SCALE  $\frac{1}{2}$  F. S.

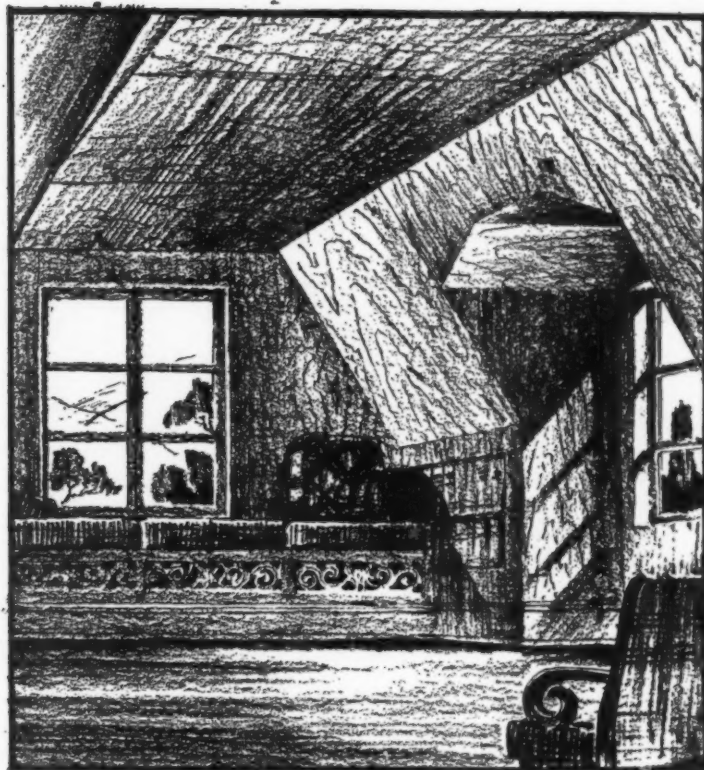
SECTION 'A' AT FLOOR

SECTION THROUGH STEEL BEAM

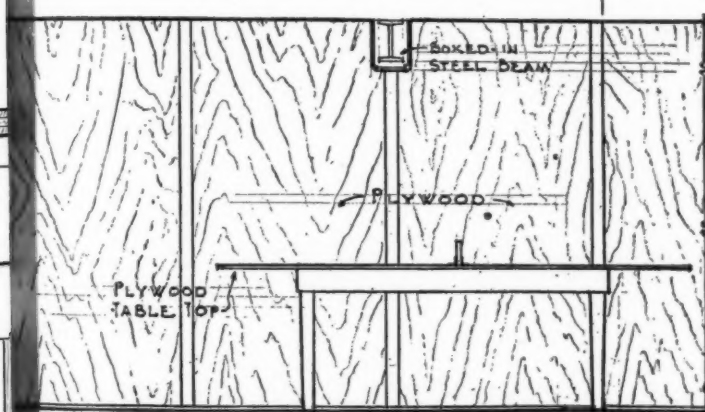




RECREATION ROOM

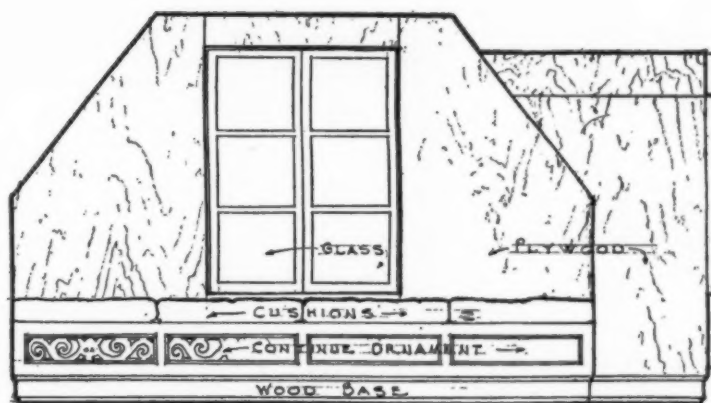


ATTIC



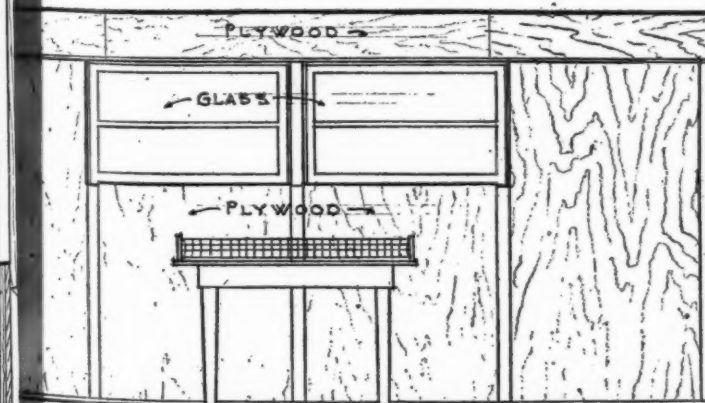
SIDE ELEVATION

SCALE 1/4" = 1'-0"



END ELEVATION

SCALE 1/4" = 1'-0"



END ELEVATION

SCALE 1/4" = 1'-0"

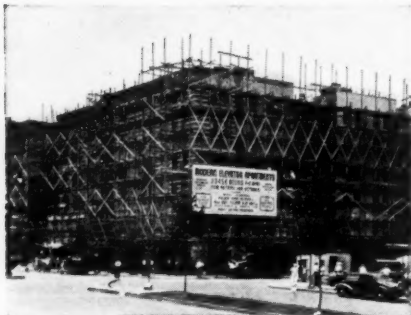


SIDE ELEVATION

SCALE 1/4" = 1'-0"



VIEW OF NEWLY REMODELED Roosevelt Garden Apartments in New York City. They were the last word in 1922.



A 23,000-yard stucco job.

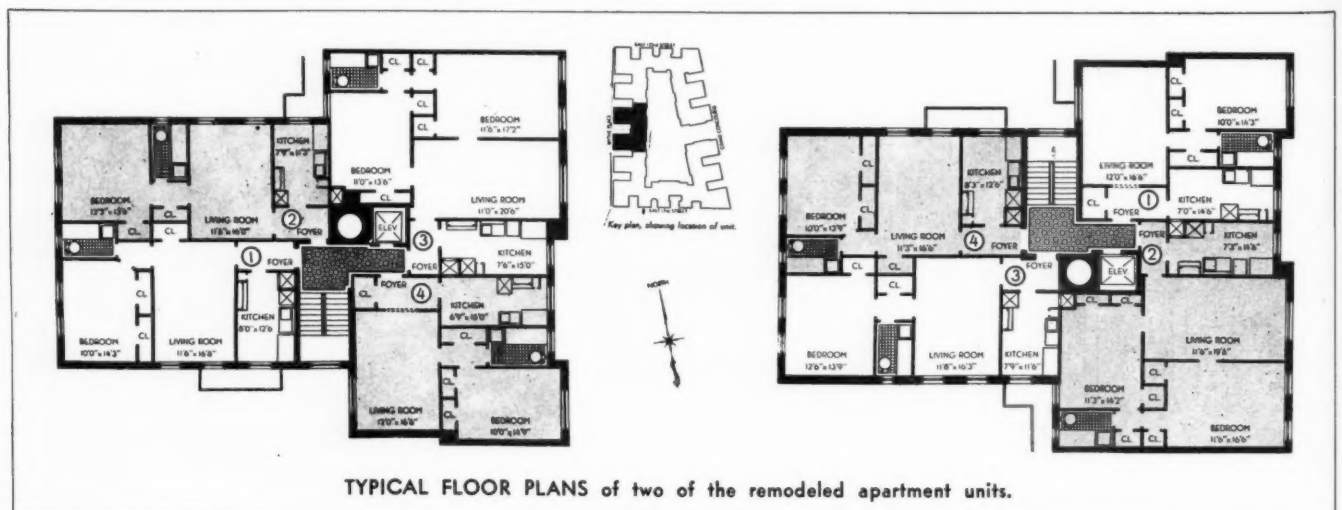
Only 16 Years Old - - -

## \$2,000,000 Apartment Building Remodeled

**D**RAMATIC proof of the rapid advance in residential living standards is given by the recent complete remodeling of the Theodore Roosevelt Apartments in New York City. This \$2,000,000 ornate Spanish structure was the last word in 1922. By 1938, John D. Butt of Butt, Gilliam & McVay, Inc., renting and management firm, decided that a gigantic "face-lifting" operation was needed to put the structure on a paying basis. The old Magnesite exterior was removed and replaced with 23,000 square yards of Artstone portland cement stucco—one of the largest stucco jobs on record. Fourteen new Watson

automatic elevators were installed, United Metal Box clothes driers, new Kohler bathroom fixtures, new quality gas ranges, Servel electric refrigerators, Crane slender radiators, a built-in radio aerial system, added showers, closets and electrical outlets.

The new structure is Neo-classic in design. Apartments were rearranged to produce more small units and eliminate waste space. Additional kitchen cabinets were supplied, and the interiors modernized and decorated throughout. The floor plans below show typical new room arrangements which bring the units up-to-date.



# IT'S EASY MONEY FOR BUILDERS AND THEIR ARCHITECTS

## \$10,000

IN PRIZES FOR BUILDING AN

*All-Gas Home*

**ALL TYPES OF HOMES ARE ELIGIBLE...  
NEW HOMES...MODERNIZED HOMES...  
SEMI-DETACHED OR ROW HOUSES**

You may have already built a home that could win a big prize and national publicity! But you can't win unless you enter!

Any home built or modernized during the period from July 31, 1937, to July 31, 1939, is eligible, provided gas equipment does the cooking, water heating, refrigeration, and house heating. No limitations as to size, style, cost, or location of houses entered.

But now's the time to get started—competition closes midnight, July 31, 1939. So mail the coupon for the booklet which contains all the information you need.

**AMERICAN GAS ASSOCIATION**

**READ THESE SIMPLE  
REQUIREMENTS AND  
ENTER NOW!**

- 1** A clear exterior photograph of house.
- 2** Interior photographs, showing gas equipment.
- 3** Floor plans—blueprints or new drawings.
- 4** List of gas appliances installed, giving manufacturer's name.
- 5** Description of special features of plan and construction.

**MAIL ENTRY  
COUPON  
NOW!**

**LET  
GAS  
DO THE 4 BIG JOBS**

**COOKING  
WATER HEATING  
REFRIGERATION  
HOUSE HEATING**



Be sure the gas appliances you specify bear the Approval Seal of the American Gas Association Testing Laboratories.

Competition Director,  
AMERICAN GAS ASSOCIATION, 420 Lexington Ave., N. Y. C.

B-3

Date \_\_\_\_\_

Last Name \_\_\_\_\_ First \_\_\_\_\_ State \_\_\_\_\_  
(Please print)

Address \_\_\_\_\_ City \_\_\_\_\_

I wish to enter A.G.A. Builders' Competition. I am a builder ☐

Note: Architects or designers may enter homes in this } Architect ☐  
contest with the written permission of the builder. } Designer ☐

Kindly forward complete details.

Signature \_\_\_\_\_



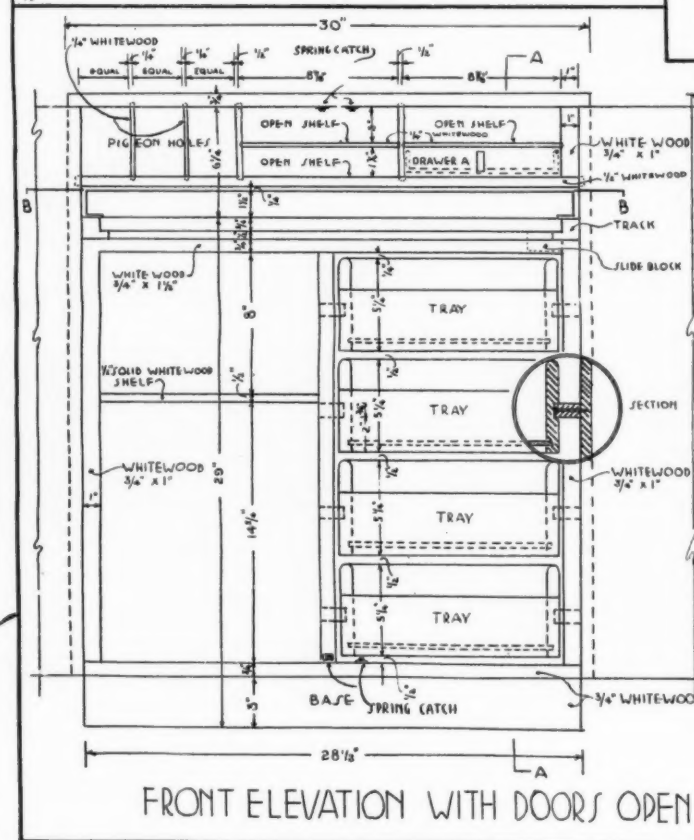
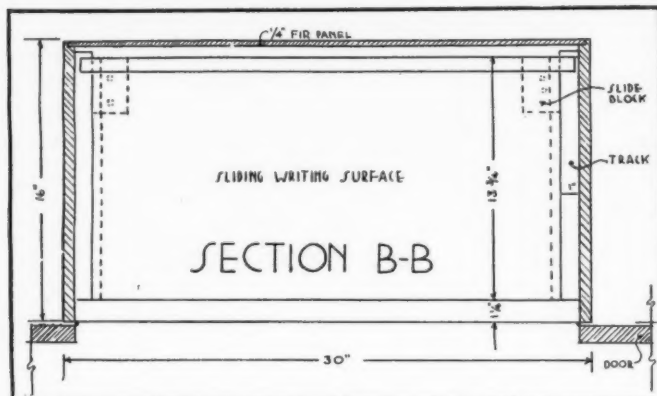
# SHOPCRAFTER'S Corner

## Things To Build for Profit or Pleasure

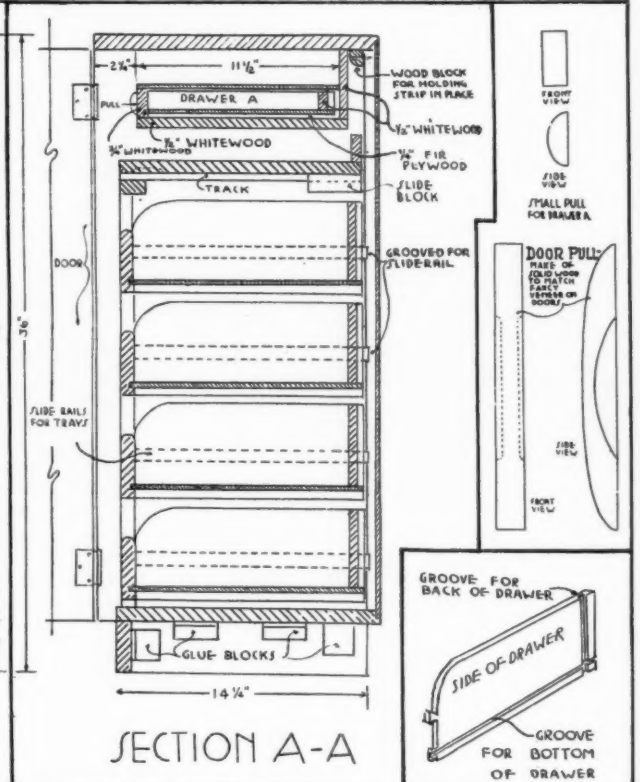
### How to Make a Modern Writing Desk

CUT all large panels for sides, top and bottom of case and writing surface, first, and apply fancy veneers to top and slides. (Or build up panels.) Set case together temporarily with clamps. Then lay out location of all slides for writing surface and drawers, levels of shelves, and location of bottom board of pigeonhole unit. Cut grooves in sides and top for pigeon-hole dividers. Cut all rails, stiles, and the bottom board of pigeonholes, and fit into place temporarily. Then lay out pigeonhole dividers. Cut and fit into place.

Then take desk apart, and glue, leaving back off. Be sure it is square. Measure for tray drawers, small drawer in pigeonhole, and for shelf, and do last fitting on writing surface. Cut all drawers and set together to make sure of fit. Take apart and glue. Edge veneer front edges of case. Then make door panels slightly oversize and fit. Make door and drawer pulls and attach.



THIS DESIGN was reproduced from more complete drawings, instructions and material list furnished by Casein Co. of America, Inc., 350 Madison Ave., New York City. It is one of the 24 plans offered to Casco users in the Casein Free Project service.



# LINABESTOS WALLBOARD



In a hospital attic, "Century" Linabestos provides an effective fire-stop.

● One of the simplest ways to increase your profit is to use "Century" Linabestos in new construction or remodeling. It is a highly economical, unburnable sheathing for both exterior and interior use. Because it is a durable, practical wallboard, it goes a long way to make satisfied customers while bringing real profit to you.



A complete exterior application of "Century" Linabestos.

**KEASBEY & MATTISON COMPANY**  
AMBLER, PENNA.  
District Sales Offices in principal cities



COPYRIGHT 1939 BY KEASBEY & MATTISON CO.

## SEND FOR DATA ON K & M BUILDING PRODUCTS

Asbestos Roofing & Siding Shingles  
Asbestos Flexible Wallboard (Sheetflextos)  
Asbestos-Cement Structural Board and Sheathing (Linabestos)  
Asbestos Decorative Walltile  
K & M Mineral Wool Insulations for the home

Underline the products listed at the left on which you want data, and mail this coupon today.

NAME \_\_\_\_\_

NAME OF FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_

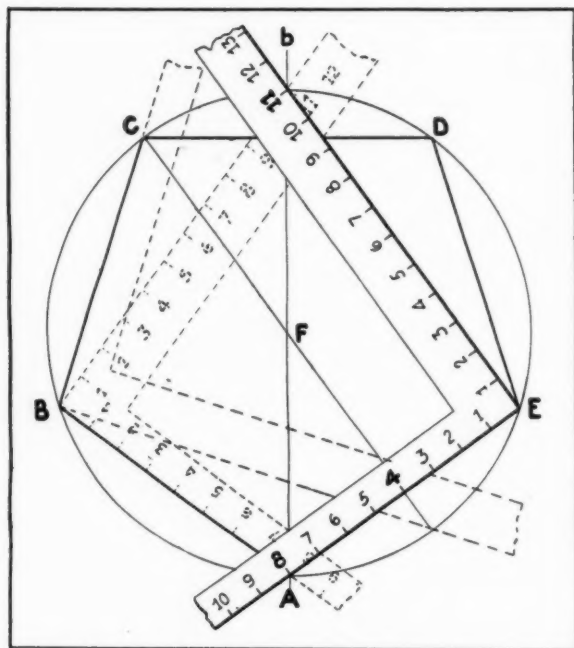
# PRACTICAL JOB POINTERS

A READERS' EXCHANGE of tested ideas and methods, taken from their own building experience. Two dollars or a year's subscription to *American Builder* is paid for each item when published. State business connection or trade.

## Laying Out Figures with Steel Square

THIS Job Pointer is offered for the benefit of those who may have forgotten how to lay out a regular pentagon or 5-sided polygon with the aid of a steel square. In the diagram, figure ABCDE represents the outside of a pentagon. To construct the pentagon, draw a line Ab, and place the square on the line as shown, with 11" on the body and 8" on the tongue. Mark along the tongue AE; then reverse the position of the square as shown at ABb, and mark along the tongue AB. The two sides of the pentagon, or at least the direction of the two sides, will then be determined. To find the direction of the side BC, erect a perpendicular to the line AE at 4, or the center of the line AE; then place the square as shown by the dotted lines. In the same manner, the directions of the other sides may be found.

To find the directions of the sides of hexagon use the figures 12" and 6.93," the latter giving the directions of sides.—FRED R. MINCKLER, Carpenter, Montesano, Wash.



FINDING sides of pentagon with a steel square.

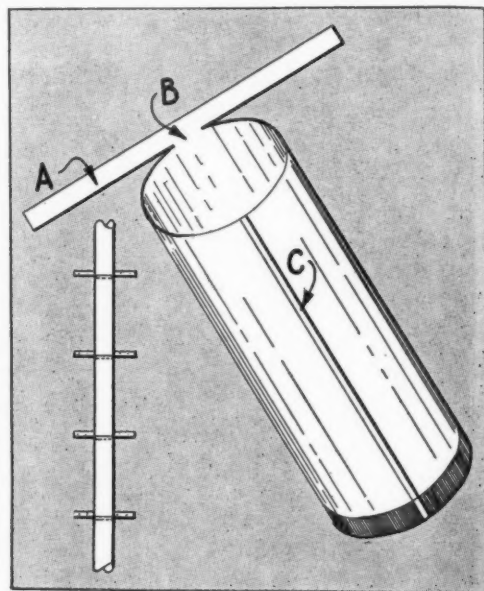
## Circulating Hot Water for the Home

IT is well known that in homes where water for domestic use is heated by a furnace coil and stored in a tank in the basement, it is necessary to run off a considerable amount of cold water before hot water reaches the faucets.

Having an arrangement of this kind in my house, I designed a circulating system in this manner. At a point in the hot water pipe the greatest possible distance from the tank, in this case about 30 feet, put in a tee and run a 1/4-inch line of pipe back to the cold line going into the furnace coil. A globe valve is to be installed in this 1/4-inch line which permits throttling down so that the water will barely circulate and also when hot water is drawn, no great amount of cold water can be drawn with it.—W. E. MOREY, St. Charles, Mo.

## Mounting for Sheet Metal Piping

THE illustration shows a form of lug with which sheet metal piping, either of furnace, downspout, ventilating or general air conditioning type may be easily fitted, and which will allow very easy mounting of the piping in different manners. One simply steps down an inch or an inch and a half on the uncrimped end of the joint of pipe, as at A, and makes a cut

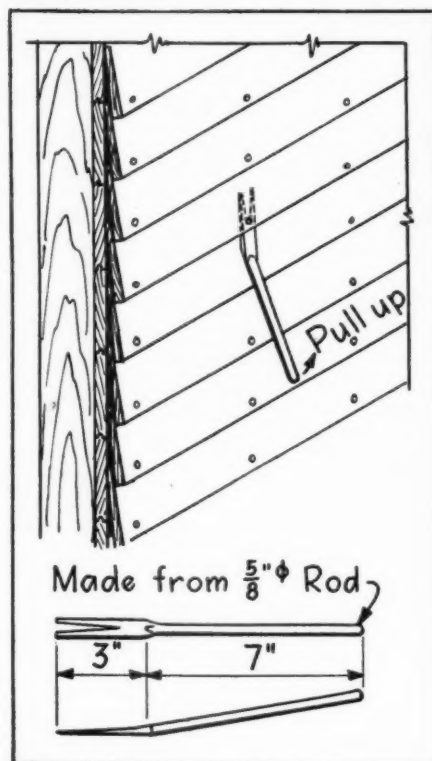


RIGHT: Lugs can also be bent backward around another pipe and soldered directly to it to fasten two courses of pipe together.

around almost half-way each way from the seam C. Leave about one and a half or two inches stand uncut, as at B, and flatten out the strip to form a lug as shown. At the side is indicated the way a string of joints will go together and will be fitted with integral lugs which can be nailed or screwed directly to a surface. But this is not the only advantage. These lugs can be bent back at right angles at any desired point, making them adaptable for insertion into brick mortar joints, either at the time a wall is being laid, or by raking the joints to make room for cementing them into place afterward.—JOHN E. HYLER, Peoria, Ill.

## Tool for Removing Siding

A HANDY tool for removing siding when it is necessary to replace some of the pieces, is shown in the sketch. This time saver more than pays for itself the first day. Sizes are given for making it out of a piece of 5/8" rod.—GEO. L. SPLITT, Builder, Hammond, Ind.



RIGHT: Tool for removing siding shown in use and in detail.



# 39 out of 45 home owners SELECTED DUNBRIK

**ELLIOT & KRANZ, INC.**  
HOME BUILDERS & SUBDIVIDERS  
GENERAL REAL ESTATE  
3849 BROADWAY  
GARY, INDIANA

DEVELOPERS AND  
BUILDERS OF  
VILLA SHORES

November 17, 1938

W. E. Dunn Manufacturing Company  
Holland, Michigan

Gentlemen:

We thought perhaps you might be interested in knowing that thirty-nine of the forty-five homes built in our Villa Shores development have been built with Dunbrik. We have found your product extremely satisfactory and very economical. The wide range of colors has made it possible for us to satisfy our most critical clients. In fact, it has been the silent salesman in more than one of our sales.

Our masons say that they prefer it to the old type clay brick, saying that it is easier to handle and because of the uniformity of the brick they can turn out jobs of which they are proud.

Since using your brick we have been able to build a substantial home at a much reduced cost.

We take this opportunity to express our appreciation for the cooperation and courtesy extended us.

*W. E. Dunn*  
*Elliot & Kranz, Inc.*  
3849 South Ash Street  
Robert, Indiana

Elliot



THESE HOME OWNERS WANTED UTMOST VALUE in beauty, permanence and low cost. Elliot & Kranz, progressive home builders, were quick to realize the extra sales value of DUNBRIK, and profited by fully meeting this preference for it among these buyers. Thus, by following the policy of supplying the biggest per dollar value, their success exceeded expectations.

IN DUNBRIK, ELLIOT & KRANZ too found their ideal requirements. — extra quality, lighter weight, greater strength, lower absorption and precision accuracy. This, coupled with DUNBRIK'S new standard of beauty — its wide range of shades and textures, enabled it to meet any architectural requirement or individual taste. All this extra value proved a big asset to Elliot & Kranz because the product was made available without delay and at lowest cost, through local DUNBRIK manufacturers.

NEW AND REVOLUTIONARY PROCESSES OF MANUFACTURE in a straight-line, powerful tamping and troweling production machine, delivering 600 impacts per minute, with 36 troweling strokes, build superiorities into DUNBRIK-DUNSTONE that have set a new high standard for masonry construction, and have made them the preferred units wherever manufactured.

BIG MANUFACTURING OPPORTUNITIES — We equip you with line production machinery. Large daily output — one or two men. Equipment costs but a fraction of other processes of equal capacity. Franchise granted — protecting your market, business and future. Many territories available, offering profitable local manufacturing businesses. Independent manufacturers already established have made real progress right from the start. They have been successful beyond anticipation, and have made billions of DUNBRIK.

IF YOU ARE INTERESTED IN BUILDING BETTER BUILDINGS AT LOWER COST, OR A PROFITABLE BUSINESS OF YOUR OWN, MAIL COUPON TODAY.

W. E. Dunn Mfg. Co.  
Holland, Michigan.

**"Show Me" Coupon**

1-39

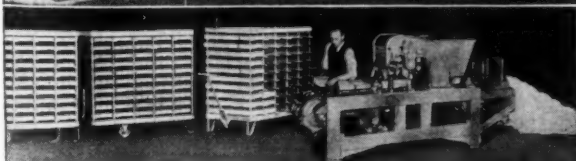
☐ Show me how I can build better buildings at lower cost, and how I can make more money as a contractor by using DUNBRIK-DUNSTONE, through your free new books.

☐ Show me how average ability and some capital win manufacturing independence in supplying DUNBRIK-DUNSTONE — the earning power of an exclusive plant in my territory, — through book "4 Keys to Success".

Name .....

Address .....

City ..... State .....



**Return Coupon to**

**W. E. Dunn Manufacturing Co.**

450 West 24th St. Holland, Michigan

# 1939 Brings Improved Building Materials

## Manufacturers Announce New, Better Materials and Equipment for Active Building Market Expected This Year

### Automatic Safety Device for Doors

**A**N INGENIOUS, automatic safety control for Kinnear motor-operated rolling doors as well as other types of Kinnear upward-acting doors has been announced by the Kinnear Manufacturing Co., Columbus, O. Through its application on the door, it practically eliminates the possibility of injury to persons or damage to cars, in case doors are carelessly closed by attendants who fail to note whether or not the opening is completely cleared when they push the control button. This has been a hazard in the past, in situations where operating control stations are remote or out of direct view of the doorway.

This device works through a compressible, air containing weatherstrip which is placed along the entire length of the bottom edge of the door. In case the door contacts an obstruction upon closing, it compresses this weatherstrip, which thereby forces air through an impulse switch, causing the door to either stop its closing travel or immediately revert to its fully open position, depending upon the method of connection to the door control circuit. The slightest pressure on the weatherstrip insures positive action.



WHEN door strikes obstacle, it stops or reverses automatically.

### Complete Basement Window Unit

**A** COMPLETELY factory-assembled basement sash unit has been added to the Embassy line of Roach & Musser, Muscatine, Iowa. It comes ready to install in wall and features the Slender-Line design for improved appearance and more light. The unit is of western Ponderosa pine, toxic treated and aluminum primed, completely weatherstripped with all hardware attached, and glazed with S.S.B. glass. The screen is 1-1/16 inches thick, western Ponderosa pine, with 16 mesh Galvanoid or copper bronze wire. Rust-resisting hinges hold sash in two positions.



NEW factory-assembled basement sash unit has a tapered lock for secure locking and easy releasing of sash.

### New Type of Air-Met Insulation

**T**HE Ruberoid Co., 500 Fifth Ave., New York, has developed a new form of aluminum foil insulation for houses as a companion product to their Type 4 Air-Met.

The new product, known as Type 2 Air-Met, uses one sheet of aluminum foil combined with one parallel sheet of vapor-resistant paper, and was developed to embody the basic Air-Met principles at a lower price than Type 4. It provides effective insulation in situations where the high insulating efficiency of Type 4 is not required, such as in the side walls of houses which, unlike roofs and ceilings, are not subjected to the direct downward rays of the sun in summer, and are required to throw back but little of the upward flow of heat from the interior of the house in winter.

Type 2 can be tacked to the faces of studding and joists, instead of having to be applied between them. A protective layer of building paper is not required with Type 2 Air-Met.



CELLULAR structure of Type 2 Air-Met insulation and application to stud faces is shown in the view at the right.

### Blanket Type Insulation

**A** NEW, highly efficient and economical insulating blanket, Forest Fleece, now being placed on the market, is composed of fine cotton fibres, treated to make them fire retarding, and felted together to form a thick layer of blanket which is sealed between a layer of waterproof paper on one side and aluminum sized kraft paper on the other side.

The sealed edges form a selvage about 1½ inches wide for tacking, tucking in or otherwise fastening the insulation into place.

Forest Fleece is put up in eight-foot lengths, 18 inches wide for use between studs, and in 36-inch widths for nailing directly to face of rafting or studs in unfinished attics and for sound deadening in floors, or wall partitions.

Features claimed for the product are high insulating value and extremely moderate cost, by J. J. Doheny Co., 326 Lake St., Belmont, Mass.

### Adjustable All Metal Window Screens

**A** NEW adjustable, all-metal window screen, placed on the market by The Haskell Company, Birmingham, Mich., is called the "Extenda" window screen and consists of a metal framed bronze screen cloth filler, which is inserted in an adjustable metal frame.

The frame may be extended two inches, both horizontally and vertically, without interfering with the insect-proof qualities of the screen. The adjustments are made without tools, in the same manner as curtain rods are adjusted.

The advantages to the contractor, building supply dealer and home owner are:

By carrying only seven sizes in stock, 28 standard openings may be accommodated. Furthermore, the slight variations in openings

(Continued to page 72)





# SNOW FLAKES ARE DOLLAR SIGNS FOR YOU



## SELL L·O·F "WINDOW CONDITIONING" NOW (DOUBLE-GLASS INSULATION)

YOU don't have to wait until next fall to sell storm sash. You can sell it right now—profitably.

All about you, home owners are experiencing the discomforts of winter—paying big fuel bills. And winter has a long way to go. All about you, people are learning that L·O·F "Window Conditioning" with storm sash and storm doors can relieve that discomfort, *Now*.

Continued, forceful L·O·F advertisements in leading national publications reaching ten million homes... nationwide publicity... feature articles in widely read publications... are presenting the outstanding features

and advantages of "Window Conditioning" to millions.

You have an impressive story to tell... the comforts that "Window Conditioning" provides... the savings in fuel effected... the low cost... the ease of installation. Tell this story to the thousands about you who have an urge to buy. Convert that urge into orders, *Now*.

**Over 5000 lumber dealers** are telling the story of "Window Conditioning"—using the effective promotional and merchandising material available. If you are not participating in the comprehensive tested L·O·F selling plan, write for complete details today. Libbey·Owens·Ford Glass Company... Toledo, Ohio.

**LIBBEY·OWENS·FORD**

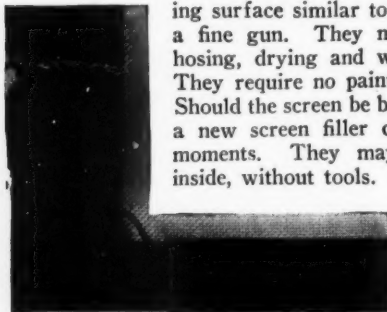


**QUALITY GLASS**



(Continued from page 70)

of the same size, due to swelling or warping, no longer require the time consuming fitting and trimming which is necessary on wood framed type screens. These screens because of their compactness take less space to store. They are finished by the Haskelite process, that gives them a handsome, rust-resisting surface similar to the finish of the barrel of a fine gun. They may be cleaned easily, by hosing, drying and wiping with an oily cloth. They require no painting or maintenance costs. Should the screen be broken by accidental means, a new screen filler can be inserted in a few moments. They may be mounted from the inside, without tools.

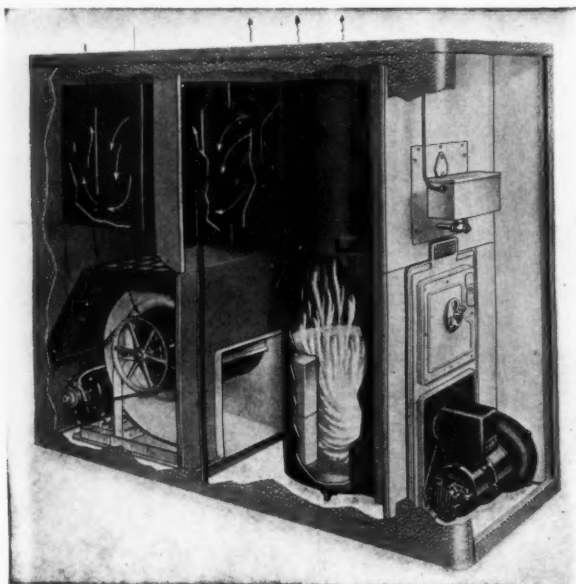


**METAL** screen frame telescopes at the corner for size adjustment.

### Small Home Oil-Fired Winter Conditioner

**F**OR 1939 the Round Oak Company, Dowagiac, Mich., has announced the introduction of a new single package, oil-fired winter air conditioner for small and medium sized homes. Designated as the XA-100 it is a companion model to a smaller one announced last year. It uses Round Oak's own "Contraflow Burner." Capable of producing 110,000 B.t.u.'s per hour at the hood, it will meet the heating requirements of houses of seven and eight rooms.

Regular equipment includes the specially designed oil burning furnace of steel, spun glass filters, multi-blade blower, automatic



**OIL-FIRED** winter air conditioner designed for small homes.

humidifier, burner and controls. Standard controls consist of a heat anticipating thermostat, combination fan switch and high limit control and combustion safety control for intermittent ignition.

Humidifier is of the evaporating type, finished complete with separate throat valve tank and cover, and accessory fittings. The various heating and air conditioning units comprising the XA-100 are compactly arranged in a surprisingly small cabinet with attractive blue Hammerloid steel finish. Removable doors, front and back, provide easy access to units.

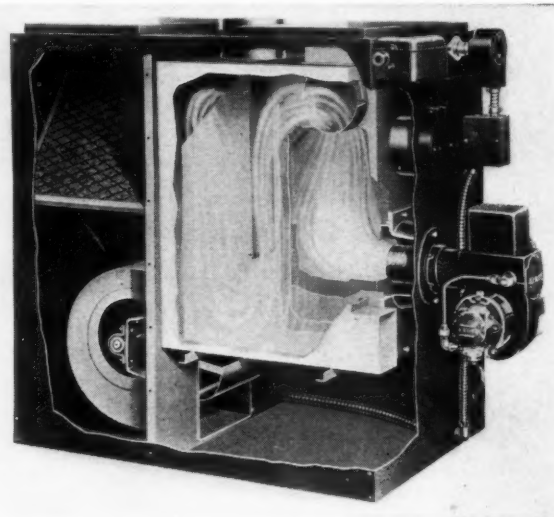
### New Airtemp Winter Air Conditioners

**A**IRTEMP, a division of Chrysler Corporation, Dayton, O., has introduced a complete new line of residential winter air conditioners. In presenting this new line of automatic heating and air conditioning equipment, low first cost, economical operation, greater compactness, and highest efficiency are desirable features which have resulted from a number of improvements in design and production.

Another feature of this new equipment is that the cabinets are bonderized—a protective coating on metal applied beneath the decorative lacquered finish to minimize rust. Cabinets are insulated with thick sheet asbestos surfaced with aluminum foil.

This new equipment is available in both oil and gas-burning models. On the oil-burning model the stainless steel combustion chamber is suspended within the fire box to which is fitted a matched Airtemp oil burner. The gas-burning models are equipped with the new Airtemp Silent-flame gas burner. This new burner employs grid mesh strips of chrome stainless steel instead of the conventional drilled ports. The stainless steel strips are arranged to give an even blue flame across the entire burner.

The gas-burning models are available in six different sizes—in capacities of 50,000 to 200,000 B.t.u. per hour output. The first size is designed especially for small homes and apartments, and is compact enough to be placed in the cramped quarters of a small closet, if need be. The oil-burning models are available in five different sizes; in capacities of 70,000 to 200,000 B.t.u. per hour output.



**NEW** winter conditioner, 130,000 B.T.U. size, is oil-fired.

### Food Waste Disposed Through Kitchen Sink

**T**HE In-Sink-Erator Co., Racine, Wis., has designed a device to dispose of all kitchen food waste with the exception of metal and crockery.

To use the In-Sink-Erator the cover is first removed and kitchen food waste placed into the chamber through the feed spout. The cold water faucet is opened to a moderate stream, then the switch is turned on to start into operation. One may then continue feeding the waste material slowly into the chamber until entirely discharged.

The In-Sink-Erator is equipped with a safety switch, which automatically turns off the electric current to the motor and eliminates any possible damage to the unit in the event the container is overloaded while in operation.



**FOOD** waste is washed down the sink drain after being ground to a disposable pulp in concealed mechanism below sink.

## "THEY MAKE A WARM AND FRIENDLY BACKGROUND"

says Joseph Chapdelain



"**USE** all three of the Western Pines," says Mr. Chapdelain, contractor-builder of Springfield, Mass. "In the homes I build you'll find the Western Pines used in sashes, doors, window and door frames, interior and exterior trim, mouldings, built-in fixtures, mantels, panelling—and in many other ways.

"There are several good reasons why I like Western Pines—one of the most important being that they are readily adaptable to many exacting uses. They're well seasoned and nicely milled.

"In recent years knotty pine panelling is more and more in demand for libraries, dens, recreation rooms, etc. I find the Western Pines workable, durable and beautiful."

**\*THESE ARE THE WESTERN PINES**

Mr. Chapdelain in the knotty pine paneled recreation room of a Longmeadow, Mass., home recently built by him.

Visit the Western Pines Exhibit at the GOLDEN GATE INTERNATIONAL EXPOSITION and the NEW YORK WORLD'S FAIR.

**The Western Pines  
Will Do Your Next  
Job Better — Try  
Them**

Specify Western Pines



From Association Mills

Western Pine Association, Yeon Building, Portland, Oregon

\* Ponderosa Pine

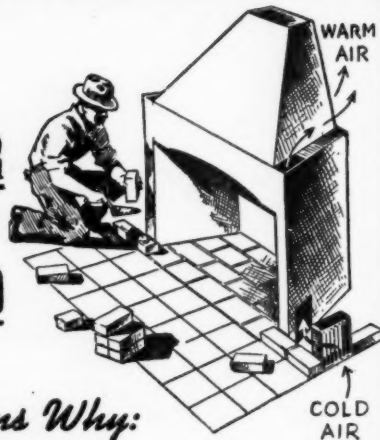
\* Idaho White Pine

\* Sugar Pine



# The HEATILATOR Fireplace

is  
**EASIER**  
to  
**BUILD**



## Three Reasons Why:

- 1—provides a metal form for the masonry.
- 2—firebox, damper, smoke - dome and down-draft shelf are all built-in parts.
- 3—all parts correctly proportioned at the factory.

The Heatilator Fireplace is easier to build because a double-walled steel heating chamber—inclosed in the masonry—serves as a metal form for the masonry. Complete from floor to flue, it replaces firebrick, damper and other materials. It does not limit either the mantel design or the type of masonry used.

## WILL NOT SMOKE

The Heatilator Fireplace has been proved in homes and camps all over America. Thousands of owners recommend it. Builders find it a real selling feature. Heatilators are stocked by leading building-supply and lumber dealers. Mail the coupon today for complete details, including installation data.

HEATILATOR COMPANY  
821 E. Brighton Avenue, Syracuse, N. Y.

# HEATILATOR Fireplace

HEATILATOR COMPANY  
821 E. Brighton Ave.  
Syracuse, N. Y.

Please send me complete details and installation data for the Heatilator Fireplace.

Name.....

Address.....

City..... State.....

## New Undercoater for Outside Priming

FROM Sherwin-Williams Co., Cleveland, O., comes the announcement of a new scientifically developed outside primer known as SWP Undercoater No. 450.

The following features are listed for the product:

Seals new and unpainted lumber, or surfaces badly weathered; uniform surfaces, often saving special treatment of porous or rough surfaces; has exceptional hiding power, overcoming fears of streaking shadows, and making a 2 coat job satisfactory in most cases; shows excellent penetration and adhesion; overcomes crawling on unweathered hard, glossy paint in protected areas.

SWP Undercoater is high in pigment concentration, yet does not pile up or form laps, and it has unusual slip under the brush, an important time and labor-saving feature. It dries to a uniform dull sheen, giving proper "tooth" for the second coat; comes prepared, ready to use, eliminating the problem of getting primers mixed just right for a given surface; may be tinted a suitable shade for a ground color.

## Outside Paint for Masonry

A PAINT relatively new to builders is being marketed by the National Chemical & Mfg. Company, Chicago, and is known as Outside Luminall. This paint has a synthetic resin and casein binder which gives as secure a bond over the mortar joint as over the face of the masonry. Walls do not have to be primed or wetted before application.



IN the upper view of a Detroit residence in the low-cost housing field, cinder block walls are seen unpainted. In the lower view two coats of Outside Luminall have given the job an intense white covering.

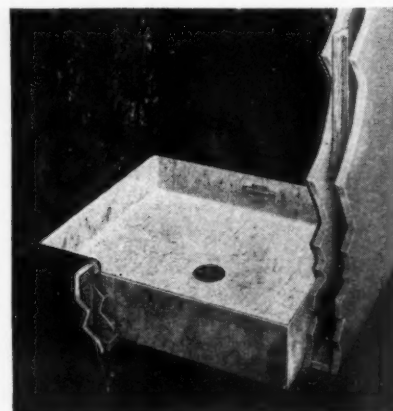


## One-Piece Rubber Shower Base

THE new Brunswick Rubberceptor, a one-piece prefabricated shower base with drain, has been announced by The Brunswick-Balke-Collender Company, Chicago. It is claimed to be 100 per cent sanitary due to its rubber composition, and easy to clean because it has no crevices or corners to hold dirt and germs. The whole receptor is molded from one piece of seamless non-oxidizing rubber, hence is both impervious and free from joints.

Because of its permanent flexibility, it will not leak or crack. The waterproof gasket joint is not affected by settling of pipes because the drain, being made up to a flexible rubber floor, forms a perfect compression joint.

The Rubberceptor can be used with marble, glass, asbestos or any other type of wainscoting. This compatibility of the Rubberceptor with any type of shower wall material gives the builder or architect a range of decorative effects and a free hand in planning his shower stall material.



THE manner in which one-piece rubber shower base fits below enclosing walls is shown at left.



## LET TILE-TEX SELL FOR YOU



ONE look at a colorful, modern bathroom, with resilient Tile-TEX floor and decorative Tile-TEX walls will convince your home-buying prospect of the plus value you build into a home.

Simple and easy to install, inexpensive to maintain, Tile-TEX walls and floors become a positive and active sales aid. They add real live color and up-to-the-minute modern designs to the key rooms of a house. They can make the homes you build possess that added "something" that closes the sale. Baths, kitchens, laundries, recreation rooms—these are the rooms that do much to sell a home—women in particular are fussy about these areas. Build these rooms better with Tile-TEX—make them different from your competitors, and watch your sales grow.

For new jobs or for modernization work, Tile-TEX walls and floors mean low first cost and high sales appeal. Our nearest approved contractor has a real fact story for you. Ask for his name and copies of the new Tile-TEX folders on floors and walls.

**TILE-TEX Company** CHICAGO HEIGHTS, ILLINOIS

OR YOU MIGHT CARE TO REPRESENT  
US IN YOUR TERRITORY

The Tile-TEX Company,  
Chicago Heights, Illinois

If my territory is open, I would like to have complete information on the Tile-TEX Dealer's proposition.

Name.....

Address.....

A-1

## HERE IS SOMETHING NEW! MASONITE IN *Color!*

BEAUTIFUL SATIN FINISH IS WASHABLE



• COLOR — beautiful, durable, washable — is MASONITE'S newest contribution to the insulation field.

• MASONITE INSULATION, TILE AND PLANK, QUARTZBOARD and PATTERNED CEILINGS are now available in today's most popular home colors — oyster white, ivory, green and buff.

Now, in one board, with one application, you not only get the valuable insulating properties of these MASONITE Products, but you also get a finished color surface that will last . . . and last . . . and last. Here is the truly modern, practical wall and ceiling surface.

The smooth, satin-like color coating can be washed with a neutral soap and a damp cloth or sponge. It is odorless and gives a high degree of light reflection. It is an exclusive color treatment, developed by MASONITE for use only on MASONITE Products.

Illustrated are MASONITE colored walls in plank effect, and one of the smart MASONITE PATTERNED CEILINGS.

Naturally, you want full information about this latest MASONITE advancement. Mark and mail the coupon today for FREE samples and complete details.



**MASONITE**

THE WONDER WOOD OF A THOUSAND USES  
A Mississippi Product

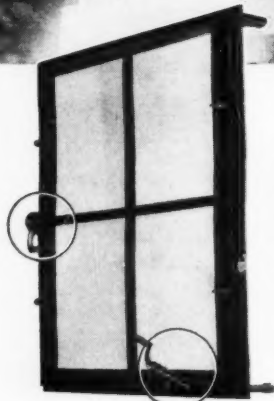
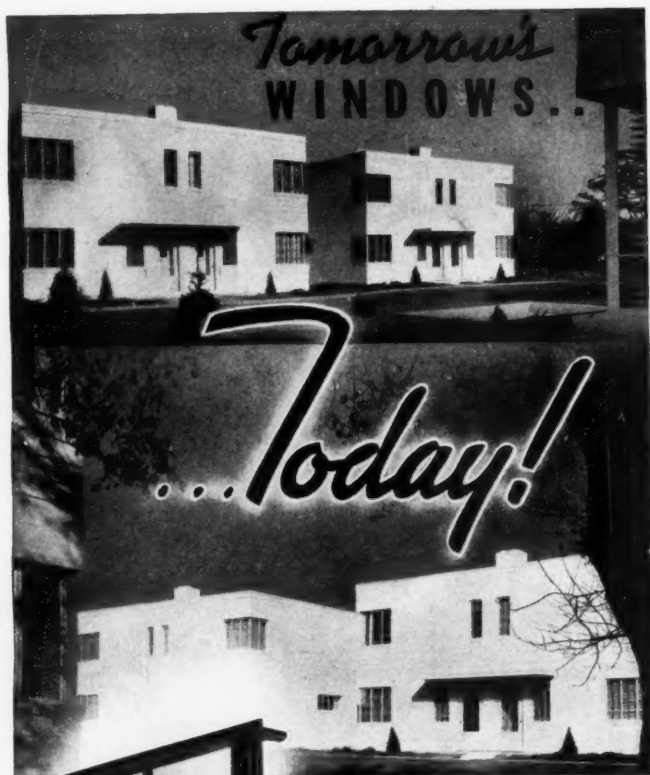
SOLD BY LUMBER DEALERS EVERYWHERE

Copyright 1939, Masonite Corporation

**FREE SAMPLES**

MASONITE CORPORATION, Dept. AB-13  
111 W. Washington St., Chicago, Ill.  
Please send FREE samples and the complete story about MASONITE COLORED BOARDS.

Name.....  
Address.....  
City..... State.....



That's how one prominent builder describes Mesker Steel Casements. Mr. W. H. Wagner, President of Hunzinger-Wagner Company, prominent Iowa builders, selected these windows of tomorrow for the O'Brien apartment group at Iowa City.

### Tomorrow's WINDOWS

are graceful, daylight-giving windows, sturdy and long lasting.

### Tomorrow's WINDOWS

are easy to open, easy to wash and easy to screen.

**MESKER STEEL CASEMENTS**  
are *Tomorrow's WINDOWS*



*Write Today*

for the big, free Mesker Handbook of Steel Sash that makes it easy to buy and sell steel windows. State whether you are a dealer or a contractor.

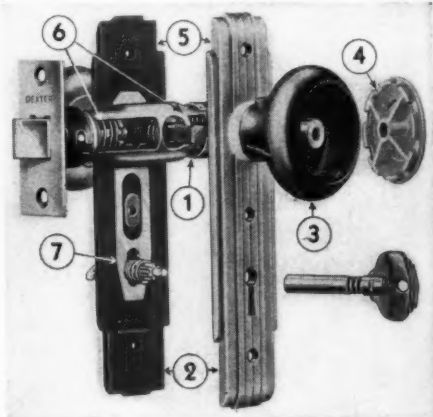
**Mesker**  
SINCE 1879  
MESKER BROS., 424 S. SEVENTH ST., ST. LOUIS, MO.

### Builder's Hardware with 1939 Features

THE National Brass Co., Grand Rapids, Mich., is featuring an entirely new line of interior door trim for 1939, which was brought out recently under the trade name "Duralin." Having the new colorful plastic trims, the latch is a composite of the many popular features found in this company's other lines.

In the numbered illustration below, the latch is shown semi-assembled that each of the features may be presented:

1. Tubular latch is of cylindrical design, installation of which requires the boring of only round holes and eliminates the need of deep mortising. 2. Treatment of the trim of each door may be handled individually with a selection in "Duralin" of eight colors or metal in any standard finish. 3. "Duralin" knob bodies are molded on threaded steel cores and equipped with positive locking set screws. 4. Knob insert tops are interchangeable with a range of tops in "Duralin" of eight colors or metal in any standard finish. 5. "Duralin" is a durable plastic composition of the same material and of the same color through and through. 6. Individual springs apply against the latch bolt and knob spindle which, together with the die-cut parts, provide an easy latch action and positive knob action. 7. Locking device is distinctive in that it applies directly against the spindle and is totally independent of the latch—operates with thumb-turn inside and emergency key outside.

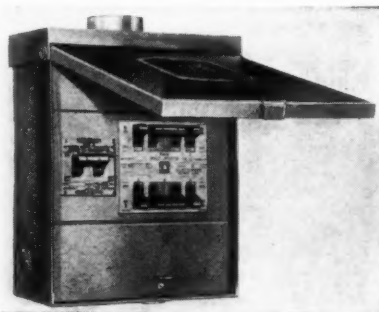


RIGHT: Parts of new interior door latch.

### Combination Electric Circuit Breaker

TO FACILITATE wiring and conserve space when it is necessary to meter a range or water heater separately from the other circuits in a home, the Square D Company, Detroit, Mich., has introduced a new multi-breaker combination known as Type MBM.

Besides providing for the lighting and device circuits (on one meter) the enclosure also provides space for a Type M double pole multi-breaker unit which is not connected to the other circuits, and thus may be wired directly to another meter without changing the wiring within the box. Circuit capacities are 15, 20, 25, 35 and 50 ampere, 115 and 115/230 volts A.C.



THE Circuit Breaker at the left, besides providing protection for usual circuits, has double pole for special household devices.

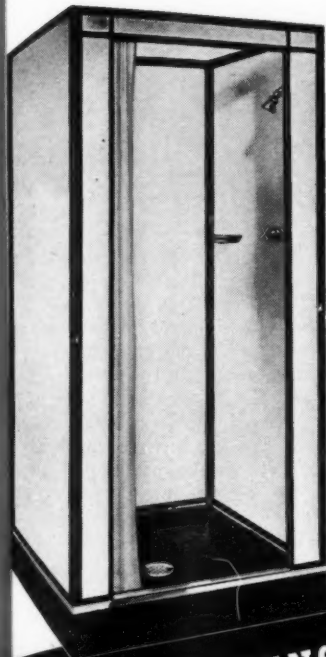
### New, Resilient Non-Slip Flooring

A NEW, resilient safety flooring material is being made by The Ohio Rubber Co., Willoughby, O. The new, non-slip flooring is composed of aluminum-oxide abrasive aggregates securely bonded into the surface of resilient rubber. Whether wet, dry or smeared with oil, the new flooring provides exceptionally effective non-slip efficiency. It is sound-absorbent and comfortable to stand or walk upon.

Available in either tile or sheet form and various popular colors, the new safety flooring has a wide scope of applications on new or old floors of wood, concrete, terrazzo, marble, steel and other materials. Installation is made both easy and economical.



# Home Buyers Know Weisway Cabinet Showers



Consistent advertising, year after year, in leading national magazines, has built nation-wide public acceptance for Weisway Cabinet Showers. Weisway's powerful story of "an extra bath in a three-foot square" helps builder's sell more homes—has created countless remodeling jobs for contractors. This year this business-creating advertising goes on—in such important publications as Time, the Weekly News Magazine, American Home, Better Homes and Gardens, Sunset Magazine and others.

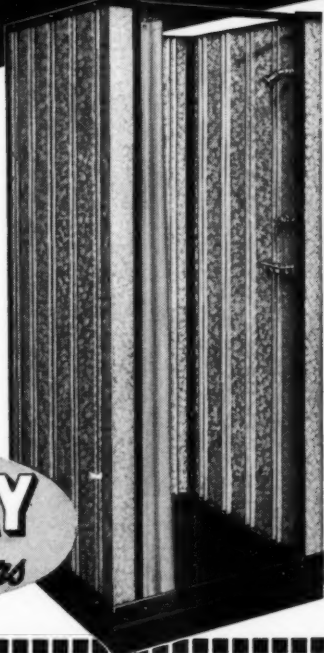
## COMPLETE RANGE OF MODELS

Styles and sizes for Master Baths... Extra Bath... Guest Room... Servants' Quarters... Recreation Room... Basements... Apartments... Hotels... Clubs... Schools... Gymnasiums... Institutions... Private Offices... Boats... Summer Cottages, Camps... Tourist Cottages... Construction Camps... Industrial Use

Weisways mean more saleable homes. Guaranteed leakproof construction assures satisfaction, dependability. Vitreous porcelain receptor with exclusive foot-grip, no-slip floor is safe, sanitary, permanent.

**MAIL COUPON** now or write for the full story of how builders are using Weisways as a sales-closing feature in both new and remodeling jobs. No obligation—act at once!

**WEISWAY**  
Cabinet Showers



**HENRY WEIS MANUFACTURING CO.** (Est. 1876)  
101 Oak Street, Elkhart, Indiana

Without obligation please send detailed information on Weisway Cabinet Showers for \_\_\_\_\_  
(Here indicate specific use)

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

**EASY TO READ  
NO REASON  
FOR ERROR**

**BLACK-ON-WHITE**  
*for easy reading*

Now you take your readings at a glance—without fear of error—even when the light is poor. You save time! The crack-proof white surface is bonded to the steel—protection against rust and corrosion. Favorite Wyteface is hard to kink, hard to curl—good for a long, useful life.

This new member of a famous family offers all the Wyteface advantages, at a new, popular price. 25, 50, 75 and 100 foot lengths; sturdy leatherite case; all mountings heavily nickel plated; sold by building material and hardware dealers. Mail the coupon for illustrated folder and complete prices.

**EST. 1867**  
**KEUFFEL & ESSER CO.**  
NEW YORK - HOBOKEN, N. J.  
CHICAGO • ST. LOUIS • SAN FRANCISCO • DETROIT • MONTREAL

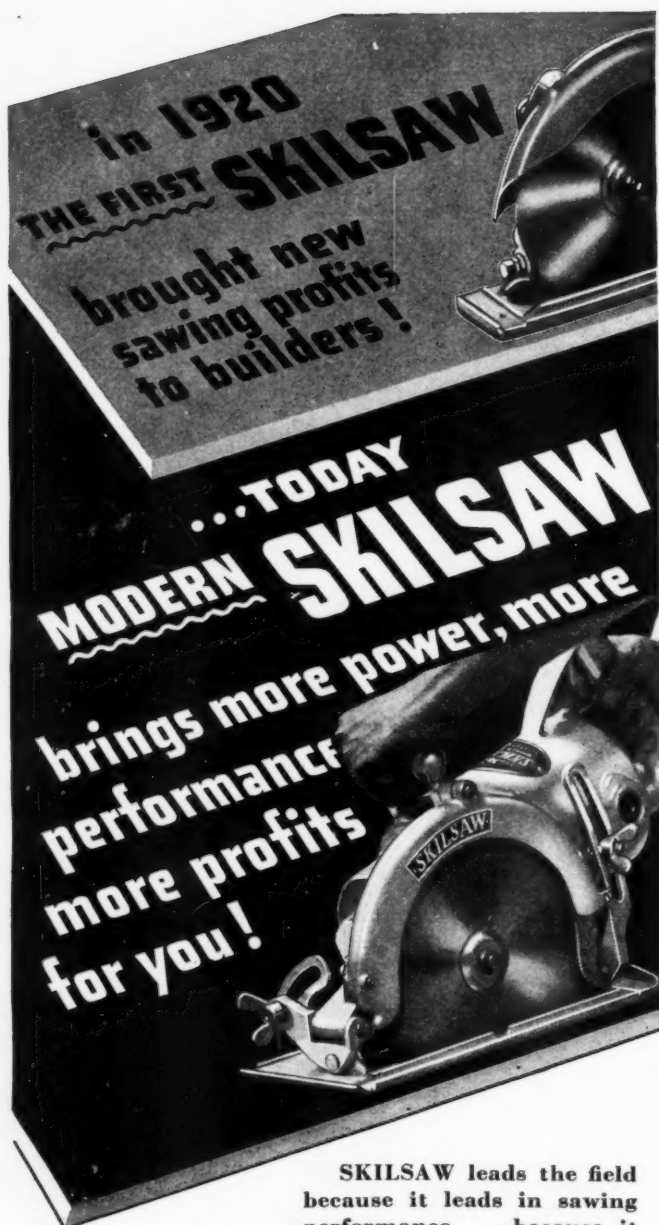
**K&E FAVORITE WYTEFACE**  
STEEL MEASURING TAPES

**LOOK FOR THIS DISPLAY**

**KEUFFEL & ESSER CO., Dept. 24, Hoboken, N.J.**  
Send folder and prices on Favorite Wyteface.

Name \_\_\_\_\_  
Address \_\_\_\_\_





**in 1920**  
**THE FIRST SKILSAW**  
**brought new**  
**sawing profits**  
**to builders!**

**...TODAY**  
**MODERN SKILSAW**  
**brings more power, more**  
**performance**  
**more profits**  
**for you!**

**SKILSAW leads the field**  
**because it leads in sawing**  
**performance ... because it**  
**represents 19 years of improvement on the first**  
**portable electric handsaw we introduced in 1920!**  
**Progressive builders prefer SKILSAW because it is**  
**lighter, saws faster, easier and deeper on any kind**  
**of job ... cuts sawing time in half, pays for itself**  
**on the first job!**

**If you're still using the old-fashioned handsaw,**  
**you're losing profits and maybe jobs. Even with**  
**older SKILSAW models, you're not getting the full**  
**benefits that a modern SKILSAW can bring! 9**  
**POWERFUL SIZES for wood, metal, stone, and**  
**compositions.**

**Sold by leading distributors of mine, mill,**  
**hardware and contractors' supplies.**

**SKILSAW, Inc., 5031 Elston Ave., Chicago, Ill.**  
**214 E. 40th St., New York—52 Brookline Ave.,**  
**Boston—1429 Spring Garden, Philadelphia—2124 Main**  
**Street, Dallas—1253 South Flower Street, Los Angeles**  
**—2065 Webster Street, Oakland.**

**SEND FOR THIS IMPORTANT BOOKLET—shows how**  
**even homes that sell under \$5,000 can be well built**  
**for less with SKILSAW—tells how to arrange for power**  
**on the job. FREE TO BUILDERS!**

**SKILSAW**  
**PORTABLE ELECTRIC TOOLS**  
**SAWS • DRILLS • BELT SANDERS • DISC SANDERS • GRINDERS • BLOWERS •**

**HOW TO CUT COSTS**  
**ON SMALL HOMES**

**SAVE MONEY IN**  
**EVERY INDUSTRY!**

## News of the Month

Building Activities and Meetings

### November Totals of Private and Public Construction Ahead of Last Year; December Residential Volume Indicates Continued Advance

THE November total of construction contracts awarded in the 37 eastern states, amounting to \$301,679,000, was the highest November total since 1929, according to F. W. Dodge Corporation. Last month's figure was 52 per cent ahead of the November, 1937, total. The accumulated total for the first eleven months of 1938 is \$2,807,489,000, compared with \$2,703,609,000 for the first eleven months of last year.

Both private and public work have been responsible for recent construction increases. November was the third successive month in which private building and engineering contracts have run ahead of the corresponding month of 1937. Last month's total of private contracts amounted to \$122,731,000, compared with \$105,512,000 in the corresponding month of last year. While private work ran behind last year through August, the records since then have been as follows: September, 10 per cent ahead of the preceding September; October, 24 per cent ahead of October, 1937; November, 16 per cent ahead of the preceding November. As a consequence of these recent increases, private construction, which was 24 per cent behind last year at the end of August, was only 17 per cent behind at the end of the eleventh month.

Public building and engineering work has run ahead of 1937 in dollar volume of contracts every month of this year except February, June and July. During the past three months, public construction contracts have more than doubled the volume reported in the corresponding months of last year.

During the first eleven months of 1938, the dollar total of public construction contracts was \$1,425,317,000 compared with \$1,036,890,000 in the first eleven months of last year. This year's volume of public construction expenditures has been divided as follows: \$528,764,000, or 37 per cent for buildings, and \$896,553,000, or 63 per cent for engineering structures.

Figures for the period Dec. 1 to 15 indicate that December residential volume may double that for the same month last year, as shown in the following table:

37 Eastern States	Dec. 1-15, '38	Dec. 1-15, '37	December, '37
Residential .....	\$ 41,571,000	\$ 22,664,000	\$ 43,480,000
Non-Residential .....	49,794,000	52,518,000	101,207,000
Public Works .....	53,254,000	20,891,000	47,082,000
Utilities .....	23,001,000	10,964,000	17,681,000
Totals .....	\$167,620,000	\$107,037,000	\$209,450,000

\*\*\*

#### JOHN D. BIGGERS

(right), president of the Libbey-Owens-Ford Glass Co., congratulates G. P. Mac-Nichol, Jr., vice-president of the company in charge of sales, after the National Glass Distributors Association had presented the first annual "award of merit for outstanding industrial accomplishment in 1938" to the Toledo company. L-O-F earned it for their comprehensive manual on modern storefront construction using structural glass, and their successful "window-conditioning" campaign.



# ONLY ONE SPRING

*but*  
**BOTH ENDS  
WORK**

in the New **Rō-WAY** Model "J"

That's the secret of the "always-balanced" lifting power in this popular residence garage door. If you haven't seen one of them in operation, you can hardly picture its coasting smoothness in operation, because with exactly the same amount of lifting power applied at exactly the same time to both sides of the door, all side binding is eliminated. There is absolutely no side-drift. But these are only a few of the many advantages this sensational new door offers. It is much simpler to install, in old or new buildings, and there are no adjustments to make at any time. All these advantages are made possible only in this Ro-Way Model "J" Door at popular prices, because it has this exclusive feature . . .

## Rō-To Live Spring (Patented)

Instead of two springs to supply lifting power to the two sides of the door, we use one Ro-To Live Spring . . . a single, powerful, full-floating coil which gives a smooth, evenly-balanced lift to both sides of the door at the same time . . . always. The Ro-To Live Spring (Patented) uses each end of the torsion spring for lifting power . . . no dead ends. Energy from each end of the live-floating spring is applied to each cable drum. One drum revolves clockwise . . . the other counter-clockwise.

## NO OFFSET BRACKETS

### Track Always Protected

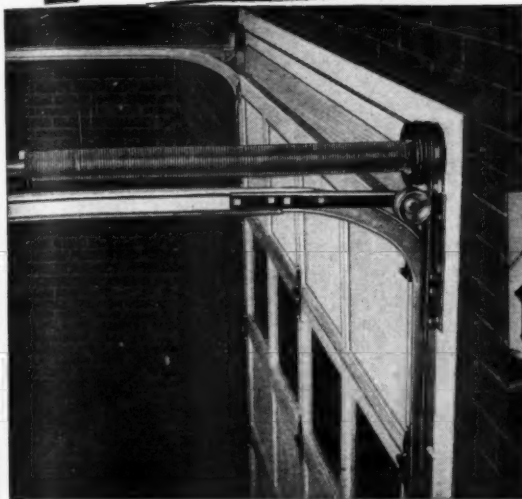
Vertical tracks attach directly to the door jamb. No track brackets used. Ball bearing steel track rollers built in rubber tires . . . will not stretch nor become loose. Cast steel pre-formed lifting cables are used. These features insure quieter operation. Headroom requirement, 9" to 14". Sideroom requirement, only 3 1/2".

Write for descriptive  
Folder and Price List

## ROWE MANUFACTURING CO.

775 Holton St.

Galesburg, Ill., U.S.A.



Other Models of Ro-Way Doors are available for all sizes . . . all buildings . . . electrically operated if desired.

## BUILDERS SAY: "It Gives Me A Big Advantage"

**YOU CAN OWN IT  
FOR ONLY \$58.00**

as shown, less motor with guard, mitre gauge, extension tables, belt and motor pulley.



## A WALKER-TURNER 10" BENCH SAW GETS WORK DONE FASTER... SAVES LABOR... BOOSTS PROFIT ON JOBS

Think how much faster, easier, cheaper you could do a large part of your work if you had this tool. Certainly it would pay for itself in a hurry!

Compare its features and we think you'll agree it's the best, most serviceable portable saw for general use. Has full 3" capacity . . . broad table with extra extension for handling large pieces . . . worm gear controlled blade and tilting table . . . ball bearings . . . many other quality points detailed in NEW 1939 CATALOG. SEND COUPON FOR IT.

**MONEY-SAVING POWER TOOLS FOR ALL BUILDING JOBS—**  
Band Saws, Jointers, Tilting Arbor Saws, Belt and Disc Sanders, Shapers, Lathes, Drill Presses, Flexible Shafts, Motor Grinders. See New Catalog.

Walker-Turner Co., Inc.,  
1019 Berckman St.,  
Plainfield, N.J.

Send copy of new catalog of your Tools.

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_

**WALKER-TURNER *Engineered* POWER TOOLS**



# 89 *houses sold* — all CONCRETE



A row of concrete homes in John P. Henrie's development at Oreland, Penna. C. A. Boardman, builder. Robert Charles Martin, architect.

## FIRESAFE CONCRETE

helped builder and realtor  
enjoy a big, profitable year  
at Oreland, Pennsylvania

**T**HESE two men worked out a plan that really sells homes! They picked a good Cape Cod design, and figured an attractive price with lot. Then they built a concrete demonstration home and based their advertising and merchandising plans on the advantages of concrete construction!

Did the public go for it? They bought 89 houses, over 50 of which have been completed. For concrete gives these appealing sales features:

- Protection from fire, storm and decay.
- Beauty, any architectural style.
- Year 'round comfort.
- Freedom from sagging walls, creaking floors, sticking doors and windows.
- And **LOW PRICE** plus upkeep thrift and high resale value.

### 35,000 Concrete Homes in 3 Years

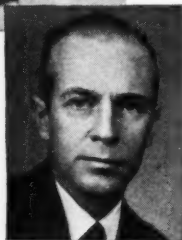
Concrete is the *fastest growing* kind of home construction. It will pay you to feature firesafe concrete. Write us if you are interested in more information on the sales advantages of concrete.

### PORTLAND CEMENT ASSOCIATION

Dept. A1-3, 33 W. Grand Ave., Chicago, Ill.



Above: C. A. Boardman  
Builder



Below: J. P. Henrie  
Realtor

## Red Cedar Shingle Bureau Plans Larger, More Ambitious 1939 Program

**B**Y ADDING two new well qualified men to its effective field staff and by expanding its national advertising campaign, the Red Cedar Shingle Bureau has disclosed a program for 1939 that will give further support and co-operation to the retail lumber trade in the sale of Certigrade red cedar shingles. The two additional field representatives are R. L. Hawkins of Little Rock, Ark., and Sam Olsen of Seattle, Wash. Mr. Hawkins will be stationed in the Missouri Valley region with headquarters at Kansas City. Mr. Olsen will cover the New England territory, supplementing the work in that region of the Bureau's veteran representative, W. D. Richardson. Both men will concentrate on service contacts with the retail lumber trade.

The Bureau will take again a very active part in the retail lumber dealer association annual meetings. An attractive exhibit of unusual design will be displayed at all the leading conventions and in each case will be attended by experienced field men ready to assist dealers and others with information about red cedar shingles.

## Metropolitan Life Housing Project Awards Largest Window and Flooring Orders

**O**N THE \$50,000,000 community housing project of the Metropolitan Life Insurance Co., located in the Bronx, New York City, and being constructed by Starrett Bros. & Eken, Inc., what is reported to be the largest single order for windows in the history of residential construction, the contract for 65,800 Fenestra bonderized steel windows and steel casings, has been awarded to Detroit Steel Products Co. The largest flooring order ever placed, calling for 7,000,000 square feet of hardwood block flooring, has been awarded to E. L. Bruce Co. of Memphis, Tenn.

## New U. S. G. Research at Mellon Institute

**D**R. Edward R. Weidlein, director, Mellon Institute, Pittsburgh, has announced the establishment of an Industrial Fellowship in that institution by the United States Gypsum Co. of Chicago, Ill. This Fellowship will conduct fundamental research on various products manufactured by the donor company, with the objective of developing new processes and technics which will have broad application in the field of building materials. This investigational work will augment the regular research activities of U.S.G.

\* \* \*



**DEDICATING JOHNS-MANVILLE BUILDING** at New York World's Fair, Grover Whalen, New York World's Fair president, and other officials inspect the giant figure of an asbestos-clad man which will be the theme for the Johns-Manville building, first private exhibit structure completed at the Fair. Left to right are: F. P. Byington, vice president of Johns-Manville; L. J. Towne, president of the A. L. Hartridge Company, contractors; William F. Lamb of Shreve, Lamb & Harmon, architects; Mr. Whalen and Mr. Brown.



# The "OVERHEAD DOOR" Manufactured by Overhead Door Corporation, Hartford City, Ind. THE DOOR WITH THE MIRACLE WEDGE

**- ADAPTABLE -**  
HOME GARAGE      GREASING STATIONS  
FACTORIES      FIRE STATIONS  
WAREHOUSES      BOAT WELLS  
SIMILAR BUILDINGS

*Salt Spray Steel*

TRACKS AND HARDWARE

BACKED BY OUR NATION WIDE SALES INSTALLATION SERVICE

**OVERHEAD DOOR CORPORATION**

HARTFORD CITY, INDIANA, U. S. A.

## CLIP THIS COUPON and MAIL NOW!

**MADE IN ANY SIZE AND FOR ANY OPENING,  
ELECTRIC OR HAND OPERATION**

Please send me literature and full information regarding your product.  
I am interested in doors for the particular purpose as checked.

Name

Address

City  State

Mail to: OVERHEAD DOOR CORPORATION, Hartford City, Indiana, U. S. A.

PRIVATE GARAGE  
PUBLIC GARAGE  
WAREHOUSE  
GREASING STATION  
WOOD DOORS  
STEEL DOORS  
FACTORY DOORS  
OTHER BUILDINGS  
ELECTRIC OPERATORS  
AS-1-39

**Clearlite**  
SHEET GLASS  
A QUALITY

EASY ON THE EYES

### ONE PANE WINDOWS

For the best light transmission the advantages of one pane windows explain why the trend is to the undivided window.

This type of window permits the maximum light transmission and eliminates eye strain. In a test conducted by the Pittsburgh Testing Laboratories, it was found that the undivided window transmits from 8% to 30% more light than the divided window.

Consider these advantages and specify one pane windows glazed with Clearlite Quality Glass.

**FOURCO GLASS COMPANY**  
General Offices: CLARKSBURG, W. VA.

Branch Sales Offices:  
NEW YORK • CHICAGO  
DETROIT • FT. SMITH, ARK.



## Now build HARDWOOD WALLS at low-cost wallboard prices!

Build stronger, harder, smoother walls...fine enough for high-cost homes—but economical enough for low-cost housing!

Here's how WELDBORD cuts building costs three ways:

**1. LOW RETAIL PRICE.** WELDBORD sells for only 7¢ per square foot.\* Mass production methods make possible this low price—only 1/3 the former cost of panels of equal quality.

(\*According to location of Lumber Dealer. Much less in carload lots)

**2. SAVES CONSTRUCTION TIME.** WELDBORD comes in light, large 1/4"-thick panels (4' x 8', 4' x 7' and 4' x 6'). Easy to handle, WELDBORD eliminates waste, speeds up erection.

**3. SAVES FINISHING COSTS.** WELDBORD has no grain raise, therefore needs no extra coats of costly special sizes before the application of paint, stain or wallpaper.

**TWO GRADES:** *Water-resistant* (blue label) for interior and temporary exterior use. *Waterproof* (red label) for permanent exterior use (slightly higher price).

Send today for sample and detailed information

### UNITED STATES PLYWOOD CORP.

616 West 46th St., New York

BRANCH OFFICES AND WAREHOUSES:  
Atlanta • Baltimore • Boston • Brooklyn • Chicago • Cincinnati • Cleveland • Detroit • Los Angeles • San Francisco • Newark • New York • Philadelphia • Rochester • Seattle



**STRONGER**—Dramatic iron ball experiment and scientific laboratory tests prove WELDBORD has the highest structural strength of any wallboard.



**SMOOTHER**—No grain raise, therefore no special treatment, no lining necessary for papering. Just size and paste as on plaster, direct to WELDBORD panel.



**EASY TO FINISH**—WELDBORD paints with smooth finish. Stains to rich, natural walnut or mahogany. No grain raise. No surface checking. No costly special treatment.

## Schedule of Association Meetings for Winter and Spring of 1939

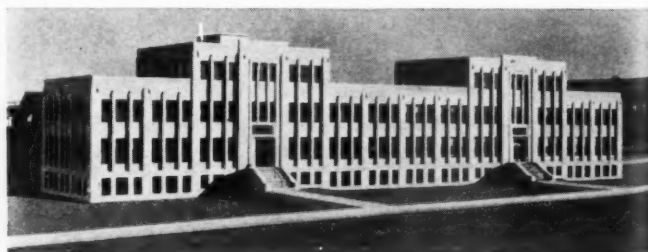
THE following groups in the building industry have made arrangements for meetings and conventions to be held on the dates and at the places listed below.

- Jan. 11-13—Middle Atlantic Lumbermen's Assn., Bellevue-Stratford Hotel, Philadelphia, Pa.
- Jan. 17-19—Northwestern Lumbermen's Assn., Civic Auditorium, Minneapolis, Minn.
- Jan. 17-20—Ohio Assn. of Retail Lumber Dealers, Deshler-Wallick, Columbus, O.
- Jan. 23-25—Mountain States Lumber Dealers' Assn., Shirley-Savoy Hotel, Denver, Colo.
- Jan. 23-26—American Society of Heating and Ventilating Engineers, Pittsburgh, Pa.
- Jan. 24-26—Northeastern Retail Lumbermen's Assn., New York City.
- Jan. 24-26—Kentucky Lumber & Supply Assn., Brown Hotel, Louisville, Ky.
- Jan. 25-27—Southwestern Lumbermen's Assn., Auditorium, Oklahoma City, Okla.
- Jan. 31-Feb. 3—Michigan Assn. of Retail Lumber Dealers, Pantlind Hotel and Municipal Auditorium, Grand Rapids, Mich.
- Feb. 1-3—Iowa Assn. of Lumber & Building Material Dealers, Des Moines, Ia.
- Feb. 7-9—Concrete Industries Exposition and Conventions, Sherman Hotel, Chicago, Ill.
- Feb. 7-9—Illinois Lumber & Material Dealers' Assn., Stevens Hotel, Chicago, Ill.
- Feb. 8-10—United Roofing Contractors Assn., Wardman Park Hotel, Washington, D.C.
- Feb. 8-10—Lumber Dealers' Assn. of Western Pennsylvania, William Penn Hotel, Pittsburgh, Pa.
- Feb. 10—Tennessee Lumber, Millwork & Supply Dealers' Assn., Nashville, Tenn.
- Feb. 14-16—Wisconsin Retail Lumbermen's Assn., Milwaukee Auditorium, Milwaukee, Wis.
- Feb. 16-17—Virginia Building Material Assn., to be announced.
- Feb. 22-24—Nebraska Lumber Merchants' Assn., Municipal Auditorium, Omaha, Nebr.
- Feb. 23-25—Western Retail Lumbermen's Assn., to be announced.
- Mar. 1-3—American Concrete Institute, Roosevelt Hotel, New York City.
- Mar. 8-9, 1939—Conference on Air Conditioning, University of Illinois, Urbana, Ill.
- Mar. 17—Florida Lumber & Millwork Assn., Orlando, Fla.
- Apr. 10-13—Lumbermen's Assn. of Texas, Beaumont, Tex.
- May 25-26—National Assn. of Commission Lumber Salesmen, Peabody Hotel, Memphis, Tenn.

## Plan More Anthracite Industries Schools

ANTHRACITE Industries, Inc., has established eight additional merchandising schools for coal dealers to be held at night as follows: Newark, N.J., Jan. 9 to Feb. 15; New Haven, Conn., Jan. 10 to Feb. 16; Baltimore, Md., Jan. 23 to Mar. 1; Washington, D.C. Jan. 24 to Mar. 2; Harrisburg, Pa., Feb. 6 to Mar. 15; Philadelphia, Pa., Feb. 7 to Mar. 16; Elizabeth, N.J., Feb. 20 to Mar. 29; New York City, Feb. 21 to Mar. 30.

\* \* \*



ADDITION TO GENERAL OFFICES OF THE BARBER ASPHALT CORP. doubles capacity and provides space for administrative staff removed from Philadelphia to Barber, N.J. The building fronts 259 feet on State Street in northern section of Perth Amboy, N.J.

# The Building Estimator's Reference Book

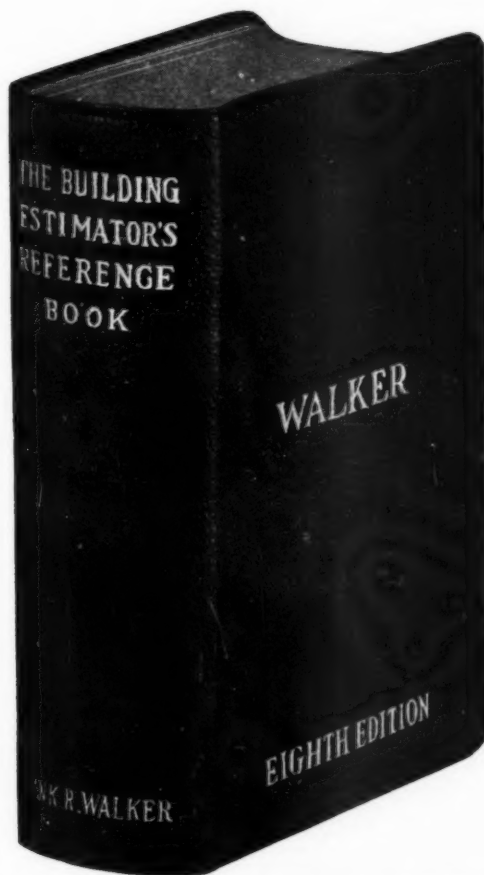
CONTAINING 1700 PAGES OF BRAND-NEW ESTIMATING AND COST DATA ON ALL THE NEW BUILDING MATERIALS AND METHODS DEVELOPED DURING THE PAST 6 YEARS. HERE IS INFORMATION THAT EVERY CONTRACTOR NEEDS TO KEEP ABREAST OF MODERN TIMES AND COMPETE FOR PRESENT DAY CONTRACTS.

Use *American Builder* "TruCost" estimates for accurate quantities, and Walker's "Building Estimator's Reference Book" for accurate labor costs and material prices. It contains complete detailed estimates on all classes of building construction, including everything from Excavating to Painters' Finish.

## COVERS

Excavating  
Concrete Foundations  
Reinforced Concrete  
Rough Carpentry and Timber Framing  
Millwork and Interior Finish  
Lathing and Plastering  
Painting and Decorating  
Glass and Glazing  
Structural Steel and Iron Work  
Masonry in all its Branches  
Sheet Metal and Duct Work  
Marble, Tile and Linoleum Floors  
Heating, Air Conditioning

AND HUNDREDS OF  
OTHER IMPORTANT  
SUBJECTS



## NEW ESTIMATING AND COST DATA ON

Concrete Joist Floors  
Glass Blocks  
Reinforced Brickwork as Laid in Earthquake Zones  
How to Frame a "Shrink-Proof, Crack-Free" House at the Cost of Ordinary Platform Framing  
Water and Dampproofing  
Ready-Mixed Concrete  
Concrete Admixtures  
Wallboard and Metal Trim  
Insulating Plank and Tile  
Rock Wool Insulation  
Sheet Foil Insulation  
Building Board, Flexible Insulation  
Built-up Roofing  
Modern Store Fronts

EVERYTHING FROM  
EXCAVATING TO  
PAINTER'S FINISH

## FREE

With Building Estimator's Reference Book

### The New Vest Pocket Estimator

This is one of the most popular little books contractors have ever used. Contains 220 pages of up-to-the-minute estimating and cost data in condensed tabular form. Fits in the vest pocket and can be instantly referred to on the job or in the office.

## FILL OUT THIS GUARANTEED ORDER FORM

American Builder and Building Age,  
30 Church Street, New York, N.Y.

Enclosed find \$10 for which send me a copy of the New Eighth Edition of The Building Estimator's Reference Book, and a copy of The Vest Pocket Estimator FREE. If I do not find the books entirely satisfactory I may return them within 5 days of receipt and you are to refund my \$10.

Name

Address

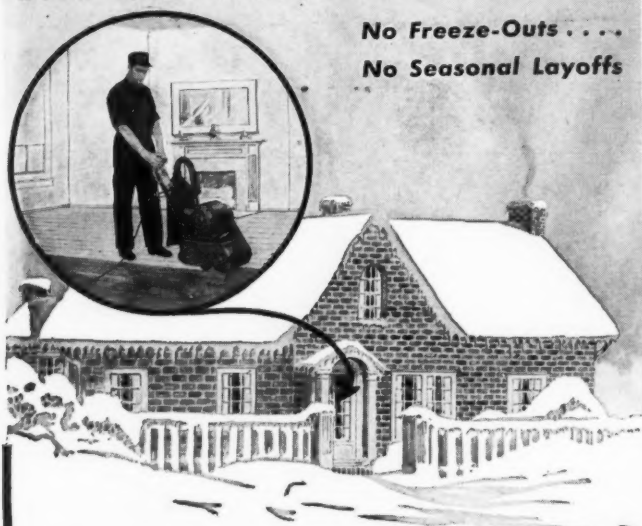
City and State

A.B. 1-39



## MAKE BIG MONEY WITH AN AMERICAN FLOOR SANDER

No Freeze-Outs . . . .  
No Seasonal Layoffs



Be your own boss — work steady all year 'round  
sanding floors the American way. Send coupon below for complete particulars — no cost.

### AMERICAN FLOOR SURFACING MACHINE COMPANY

511 SO. ST. CLAIR ST.

TOLEDO, OHIO

Gentlemen:

Send complete details and prices without obligation.

☐ I want to go into floor surfacing business.

☐ I would use sander in my contracting business.

Name .....

Street .....

City .....

State .....

**New!** **EXTENDA**  
Adjustable  
ALL METAL  
**WINDOW  
SCREEN**

The fine mesh bronze screen unit is quickly removable from the frame. Easily and inexpensively replaced if necessary.

As easily adjusted as a curtain rod! Quickly installed from the inside without tools. Neat metal frames, finished like the barrel of a fine gun with Has-kelite, require no painting or maintenance.

### 7 Stock Sizes Fit 28 Openings

More profits in screens! Meet all demands from 7 stock sizes instead of 28. Extensions operate both vertically and horizontally with 2" adjustment. Installation requires no fitting or trimming, even though openings are out of square, or warped. *Extenda* means lower installation costs, smaller inventory, less storage space. Saves money on installation and maintenance, increases resale profits. Perfect protection from insects, with full sash operation.

#### Literature Free

Full information, prices and discounts on request.

Write Today

#### The Haskel Co.

211 Field Building, Birmingham, Mich.

Some desirable territories open for aggressive representatives. State lines handled and give full information in first letter.

Low Prices  
\$2 and \$3 Retail

## BOOKS on BUILDING

A REVIEW of current publications in the building field. For information about these books, write American Builder, Book Service Dept., 30 Church Street, New York City or the publishers.

**AMERICAN HARDWOOD FLOORING AND ITS USES**—By W. LeRoy Neubrech. 1938. 35 pages, illus., 6x9, paper. Superintendent of Documents, Washington, D.C. 10 cents.

This bulletin has been prepared to answer the need for authentic information on the manufacture of hardwood flooring, the various types available, its application and finishes. Some of the subjects covered are: flooring requirements; principal American hardwoods used for flooring; hardwood flooring grades and sizes; methods of laying hardwood floors, with recommended practices; method of estimating quantity of strip flooring needed; precautions in handling hardwood flooring; finishes for hardwood floors; and, refinishing used hardwood floors.

**TEN LITTLE COTTAGES**—by R. C. Hunter, Architect, 501 Fifth Ave., New York City. 10 pages, 10 illus., 8 1/2 x 5 1/2, paper, 25 cents.

Pen sketches of ten small frame houses in the \$6,000 range designed to meet the popular demand for a low, spready one and one-half story type of house with simplified provision for expansion. Included are perspective drawing, block floor plan, construction details, color scheme and description of special features.

**STEEL CONSTRUCTION**—by Henry Jackson Burt and C. H. Sandberg. 1939. 4th. 438 pages, 248 illus., 37 tables, 5 1/2 x 8 1/2, cloth. American Technical Society, Chicago. \$3.50.

In this book the use of facts and formulas needed in designing the structural steel framework for buildings is shown by actual examples of a practical nature, which serve not only to teach the proper application but to illustrate current practice. It is also of interest to designers, as it brings together the necessary data for the complete design of structural steel work for business buildings. This revised edition is written in a "how-to-do-it" style, and the material has been rearranged into chapter form to make it more convenient for use.

**PLAN YOUR HOUSE TO SUIT YOURSELF**—by Tyler Stewart Rogers. 1938. 282 pages, illus., 7 1/4 x 9 1/4, cloth. Charles Scribner's Sons, 597 Fifth Ave., New York City. \$3.50.

Although this book is written in simple, non-technical language for the layman and homeowner, it contains interesting and valuable information for building industry men and should be a good book to which prospective clients might be referred. Starting with an inventory of the family and its habits of life the author helps the reader to determine, room by room, what he needs to accommodate people, furniture and equipment. Each chapter relating to a part of the house closes with a record form in which may be entered the family's carefully considered requirements and desires.

**NATIONAL HANDBOOK**—by Martin F. White and Frank Z. Smith. 1938. 160 pages, illus., tables, 5 3/8 x 8 1/4, flexible. National Plan Service, Inc., 1315 W. Congress St., Chicago. \$5.00.

This is a comprehensive handbook on plan reading, material listing and estimating, written in a clear and easily understood style and profusely illustrated. The pertinent data and practical information will prove unusually helpful to those interested in home construction, and safeguard against hit-or-miss figuring and estimating; a dependable guide for the lumber dealer and his contractor customers.

## A Pair of Hard Working MODERN MONARCHS

### High Speed Single Spindle Shaper

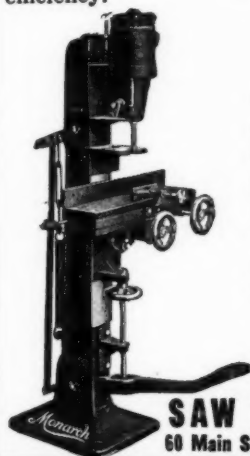
Precision ball bearings, and 10,000 R.P.M. speed allow quantity and quality production with highest efficiency.



### Hollow Chisel Mortiser

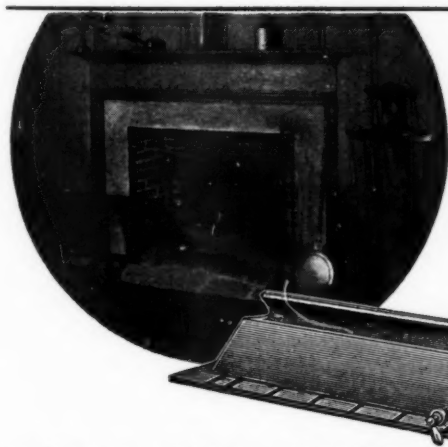
This high speed, low priced precision tool turns out fast, accurate work on both hard and soft woods. Investigate the outstanding features that make it the mortiser.

Send for FREE Catalog showing the complete line of Modern MONARCH Woodworking Machinery.



**AMERICAN  
SAW MILL MACHINERY CO.**  
60 Main Street Hackensack, N. J.

## PEERLESS *dampers*



**NO DUST  
NO SMOKE  
NO HEAT  
LOSS**

## TAKE THE GUESS OUT OF FIREPLACE CONSTRUCTION

To be sure the fireplace operates with 100% efficiency install a PEERLESS DOME DAMPER. Peerless dampers seal the chimney flue when the fireplace is not in use—this is essential to efficient operation of modern heating and air conditioning installation.

Peerless dampers are available in three styles—rotary, poker and chain control. All built to last a lifetime, of heavy stove plate cast iron.

### OTHER PEERLESS PRODUCTS

Fireplace fixtures—ash dumps—coal windows—ash pit doors—garbage receivers—radiant gas heaters—Gas Conversion Burners and Stokers. Details and prices on request.

**PEERLESS MANUFACTURING CORP.**  
1400 W. Ormsby Ave. Louisville, Ky.

## KWIK-MIX

### MODERN 3 1/2-S TRAIL-MIX

LESS WEIGHT — END DISCHARGE  
COMPACT — AIR-COOLED ENGINE  
FASTER WHEEL BARROW LOADING  
ANTI-FRICTION BEARINGS

**N  
E  
W  
!**



**N  
E  
W  
!**

WRITE FOR  
BULLETIN TODAY!

**KWIK-MIX CONCRETE MIXER CO.**  
PORT WASHINGTON . . . WISCONSIN



## Be a Contractor— Make Big Money NOW

Uncle Sam will help you make money if you are ready.

Billions of dollars are being used to make jobs and the Home Building Program offers the biggest chance to make money carpenters have ever known. Are YOU Ready? Can you remodel from start to finish—do you know the tricks of estimating, laying out, etc.? Here's your chance to get these facts—quickly—easily, without study or work—just put your finger on what you want to know instantly. Don't miss the building boom.

## 5 Big Books Shipped FREE

for examination. 2400 Pages, hundreds of diagrams, estimate sheets, etc., instructions on blueprint reading, estimating framing, construction, architectural drawing, plumbing, heating, etc., make these books invaluable to any carpenter who wants to Cash in NOW on today's opportunities. This may be the chance of a lifetime. Jiffy Index makes these facts available in a few seconds. Remember these five big books all shipped to You FREE for examination. Send the coupon, there is no obligation. Get these books and be ready to bid on ANY building or modernizing job NOW.

### Consulting Membership FREE!

Privilege of consulting experts of million-dollar American Technical Society on any building problem for one year without extra charge, if you mail coupon immediately.

For Free Offer Use Coupon — — — — —  
American Technical Society,  
Drexel Ave., at 58th St., Dept. G133, Chicago, Ill.

I would like to look at the five books described above. I will pay the few cents delivery charges only and will examine them thoroughly and return them in ten days unless I like them in which case I will send you \$2.00 and after that \$3.00 per month until the total price of only \$19.80 is paid. You are also to send me your book, "Blueprint Reading," and consulting membership certificate without extra charge.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Attach letter stating age, employer's name and address and that of at least one business man as a reference.



Yes, you get *TruCost* tables  
... with Holt's **KWIC-KOST**

### ESTIMATING SYSTEMS

You can figure a complete, accurate price on a new building in one hour.

THIS "BOOK OF BOOKS  
FOR BUILDERS"



gives you the jump on your competitors. KWIC-KOST eliminates costly omissions.

This latest guide is the perfected culmination of 30 years of experience by America's foremost instructor of Simplified Estimating. Handy pocket-size, 3 3/4" x 6 3/4" Looseleaf and contains all the TRU-COST tables.

### KWIC-KOST SAVES TEDIOUS NIGHTS OF FIGURING

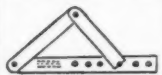
Holt's new KWIC-KOST Estimating Systems contains more and better tables than former Holt books.

PRICE ONLY \$7.00

Money Back If Not Satisfied

MAIL THIS  
COUPON  
TODAY!

AND GET HOLT'S  
ROOF-RULE FREE



HOLT PUBLISHING COMPANY  
Lumber Exchange, Minneapolis, Minn.

Please send me one Holt's KWIC-KOST Estimating Systems. I/We will pay the postman \$7.00 plus postage (in full) upon delivery. And include without additional charge or obligation one Holt's Roof-Rule.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

SEND NO  
MONEY!

30% to 40% **FASTER**

MEASURING BATCH  
HOPPER  
Fast as a  
Power  
Loader

TIMKENS,  
PNEUMATIC  
TIRES and  
SPRINGS —  
for Faster  
Trailing,  
Longer Life

**JAEGER**  
**UTILITY MIXER**  
— Costs about 1/2  
the Price of Heavy  
5S Non-Tilts!

Load while you mix and discharge  
—get 30 to 40 yards of concrete a  
day — all most jobs can handle.  
Patented Criss-Cross Re-Mix Drum  
produces better concrete. Syphon  
Tank for Accurate Water Measuring—  
Biggest non-tilt mixer value  
on the market.

The JAEGER MACHINE CO.

Largest Maker of Mixers—Pumps, Hoists, 521 Dublin Ave., Columbus, O.  
Gentlemen: Send Catalog and Prices on latest Utility Mixer  
and other sizes Non-Tilts, Tilters, for Concrete, Mortar, Plaster.

Name \_\_\_\_\_

Address \_\_\_\_\_

## LETTERS from Readers on All Subjects

Facts, opinions and advice  
welcomed here

### Public Interested in Sensible Homes

Providence, R.I.

To the Editor:

After reading "Sensationalism Does Not Encourage Home Building" in the November *American Builder*, I am prompted to send you the enclosed folders, which describe the home promotion we have been sponsoring here at the *Journal* during the past year. (A winsome Early American home is exhibited.—Ed.)

Its purpose, as you can judge, is to encourage sound building and afford prospective home buyers a basis for evaluating homes offered for sale.

This particular leaflet is distributed to people visiting the Certified Homes, six of which have been open to the public during the last year.

Apparently the idea works! The public still flocks to each new house we open; builders are increasingly aware of the prestige within their reach through the program. We think it is good stuff and plan to continue the idea indefinitely.

THE PROVIDENCE JOURNAL,  
By Franklin Hurd, Jr.,  
Certified Home Department.

### To Put Builders Back to Work

Chicago.

To the Editor:

The carnival is over. The Democrats are on their way out. The bruising they took at the recent election is just a warm up for the slaughter that awaits them in '40. The end was inevitable. Sooner or later the thing that made them was certain to break them, namely the depression.

Fireside chats, to some, are a ducky pastime, but the multitude knows that they fall a long way short of putting steaks on the table. Temporary measures are acceptable in times of emergency, but the life of an emergency just doesn't last six years.

The American people are a gullible lot. Yet there is a limit to the amount of punishment they will assimilate. The Democrats have just found it out. In the history of this nation there was never a President, who promised the people more and delivered less, than Franklin D. Roosevelt. In his charming addresses he has repeatedly said "To judge an individual, not by his words, but by his accomplishments." Latest returns indicate a trend by the voters towards the adoption of our President's philosophy.

It is bad enough to fail miserably in producing any semblance of a business revival during six long years with all governmental agencies and with billions of dollars at your finger tips. But it is unforgivable when an unquenchable passion for "I am it" glory permits that administration to be heavily spotted with graft, wastefulness, scandals, etc.

Bad as conditions are today, they could be worse. The blessing is that the people caught up with the nation wreckers in six years. Under the present set-up there is no more chance of producing a business revival in six or sixty years, than there would be of making water run up hill. Just so long as those fifteen or twenty paid workers, you saw in front of each polling place at the recent election, continue to extract money from the pockets of honest citizens, just so long will the multitude of excessive taxes, which pay their salaries, continue to completely smother business.

The Republicans are coming back. That's news. But infinitely more important to the multitude of hard working citizens is the question "Are they going to continue on where the Democrats left off, or are they going to practice economy by drastically reducing costs?" Throwing out one gang of pay

(Continued to page 88)



# EDWARDS METAL SPANISH TILE

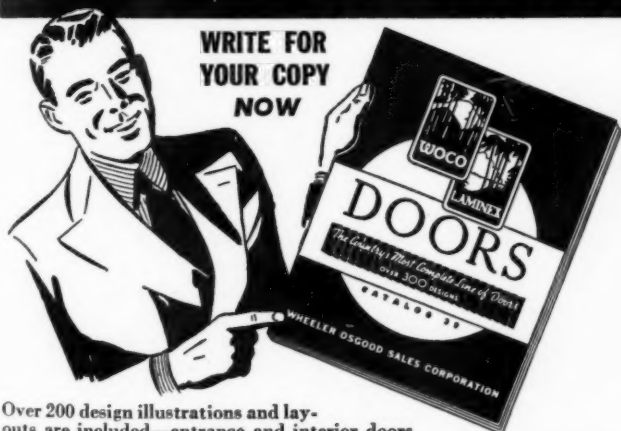


**JUST** what you need for those particular customers who want the beauty and distinction of clay tile without the expensive roof framing necessary to carry the extra weight. Edwards Metal Spanish Tile have everything: looks, strength, lifetime service, moderate cost. They are light in weight, fire-, wind- and lightning-proof. Can't chip, crack or slide out of place.

Write today for Catalog 72. Send roof measurements with pitch and shape for estimate.

**THE EDWARDS MANUFACTURING CO.**  
542-562 EGGLESTON AVENUE CINCINNATI, OHIO

## Coming... The New Door Catalog



WRITE FOR  
YOUR COPY  
NOW

Over 200 design illustrations and layouts are included—entrance and interior doors for residences—overhead type and standard doors for garages—modern and conventional doors for all types of commercial buildings.

It is issued by the manufacturers of the Country's Most Complete Line of Doors and contains important information, which will save money and time for you.

Write for your free copy now! It will be mailed in the order in which the requests are received. No obligation.

Note to Architects: This catalog is included in the 1939 issue of Sweet's Architectural Catalog.

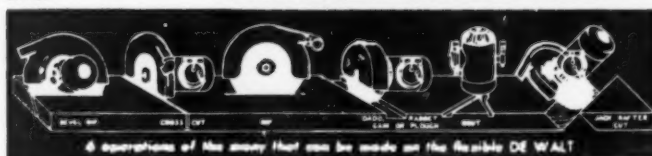
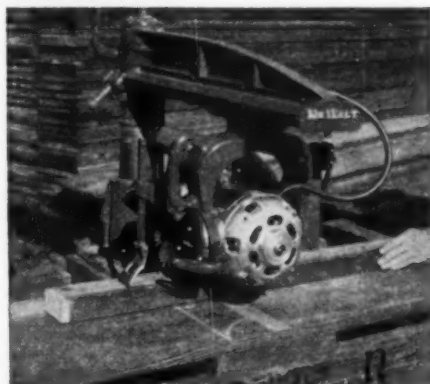
### WHEELER OSGOOD SALES CORPORATION

Factory: Tacoma, Washington  
General Sales Offices: 122 South Michigan Avenue, Chicago, Illinois  
New York • San Francisco • Los Angeles • Dallas • Wichita • Tacoma  
Address Dept. A.

*The Country's Most Complete Line of Doors*

# Good NEWS ANNOUNCING LOW PRICED MODEL FOR BUILDERS

No other low priced woodworker offers so many patented features as this new type GV DeWalt. The same world-famous DeWalt principles, yet light in weight and easily carried right to the job. There is a reason why the up-to-the-minute contractors of the country are using DeWalt Machines. The tremendous savings have surprised most critical builders. Mr. Worrall writes, "Saves \$550.00 on one operation, any wonder I am enthusiastic."



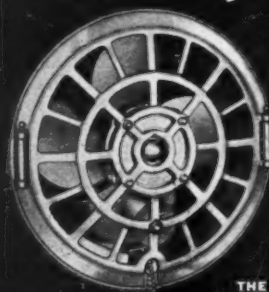
**EASY TO OWN**—Here is a low priced model you can buy on Easy Payment terms. It has all the flexibility and accuracy of heavier DeWalts. Ideal because easily portable right to the job. Quickly financed through the savings effected.

MAKE A DATE NOW AND LEARN HOW

America's leading builders save 20 to 30%. We'll show you how right on your job—no obligation. Write today.

**DE WALT**  
322 FOUNTAIN AVE.  
LANCASTER, PENNA.

## ASK YOUR WIFE this Question...



THE DE LUXE

DO WOMEN REALLY WANT TO GET RID OF COOKING ODORS?

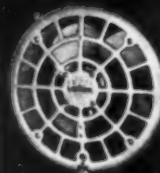
## VICTOR In-Bilt VENTILATORS

Her answer will prove to you why you should install a kitchen exhaust fan in every home you build. No careful housewife wants cooking odors spreading through the house, particularly in a new, modern home. That's why Victor Ventilators should go on your must list of features for the homes you are planning now. There's a Victor model for every type and size of home—even to the small, low-cost dwellings where price is so important.



**FREE!** Get the complete facts about Victor In-Bilt Ventilators now! Write for free ventilation data book today!

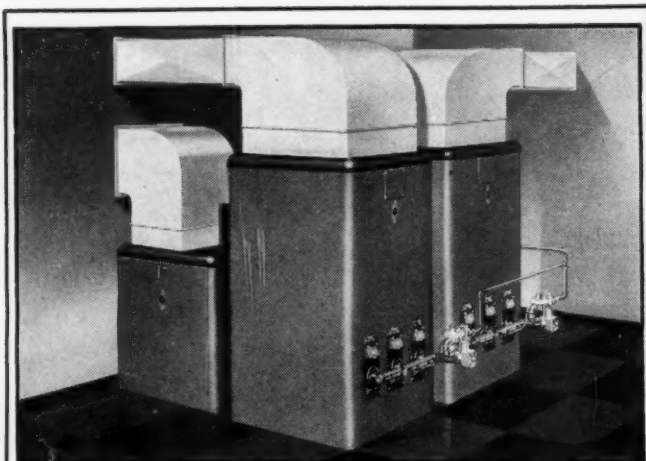
**VICTOR ELECTRIC PRODUCTS, INC.**  
733 Reading Road Cincinnati, Ohio



THE STANDARD



THE MASTER



### Payne Unit Heat Is "Custom-Made" For Every Home You Build

A 5-room bungalow or a 14-room mansion—either can be heated to perfection with the new Model "A" Payne Unit Furnace. Every home you build—large or small—can be equipped with just as many or as few Units as are necessary for luxurious comfort—and economy.

Combine the Payne Unit Furnace with the new Payne Modernair (as pictured above) and your prospective buyers are assured of the last word in winter air-conditioning—summer ventilation. Smaller installations for fewer rooms afford the same luxury. Write today.



**Payne**

**FURNACE & SUPPLY CO., INC.**  
BEVERLY HILLS • CALIFORNIA

### MAJESTIC BUILDING NECESSITIES



**The MAJESTIC Company**  
703 ERIE STREET, HUNTINGTON, INDIANA

(Continued from page 86)

rollers and opening the door to another hungry mob won't solve our economic ills.

To bring back prosperity the thousands of unnecessary bureaus, and the hundreds of thousands of dead-head pay rollers, created by the bubble blowers, whether or not they are civil service, will have to go bye-bye. The \$2,000,000,000.00 paid annually by the tax payers to maintain these buzzards would be more healthful to the nation if circulating in private enterprise.

Republican leaders remember that for every parasite and leech in this nation, who believes himself entitled to a livelihood through the medium of a soft government job, there are at least twenty-five hard working citizens who never were and who never wanted to be on a government pay roll. Those are the individuals to enlist in your cause.

With their help you can travel a great distance. Practice and preach rigid economy, you will improve business and hit the top. Offer jobs, glorify the thousands of our present needless departments, talk politics and you will wind up in the same ash can the Demos now have their feet in.

JOHN J. MANGAN,  
Builder and Realtor.

### Builder House Wins Prize

Joliet, Ill.

To the Editor:

My house of insulated stone which you illustrated on pages 56 and 57 of the May, 1938, *American Builder* was among the prize winners of the Home Building and Modernization Contest sponsored by the Public Service Company of Northern Illinois.

Ten basic specifications were considered in judging the homes: (1) Good location and architecture; (2) sound construction and skilled labor; (3) quality materials and equipment; (4) landscaping and interior decoration; (5) sound financing; (6) new materials; (7) plumbing and sanitation; (8) heating and air conditioning; (9) insulation and sound deadening; and (10) electric or gas services, or both.

R. A. POWERS, President,  
Joliet Material Company.

### Uses Telephone Directories

New York City.

To the Editor:

I thought your readers would be interested in the following report that was received from the Operating Telephone Company in Texas. Mr. N. H. Banister, Deputy Procurement Office of the Treasury Department, Amarillo, Tex., writes the following which I consider very pertinent to the industry:

"I have secured quite a few telephone directories to use in advertising bids for materials which my office purchases. Most of the men with the same job that I have all over the United States rely on the list of business firms shown in the classified telephone directories to submit bids, just as I do. In the past few months, I have made quite a few purchases from Fort Worth firms which I selected from the Fort Worth classified directory. Some of the things that I have bought that I recall are: concrete wall ties, bar bending machines, steel bars, construction machinery, engineers' supplies, lumber, builders' hardware, and miscellaneous hardware for recreation areas, sand and gravel, and pumps.

"I recall buying a pump from Axtell Co. after advertising for bids from all the firms listed in the classified directory at the heading of 'Pumps.' I have made quite a few awards of contracts from the lists in the Fort Worth telephone book, and I think your book is a big convenience to everybody.

"In your Pampa directory, I selected two machine shops, Jones-Everett and Cabot shops, and have awarded both of them jobs. I have also made some awards to lumber companies listed in the classified Pampa book. I recall two firms who received business from me were Fix Rig and Whitehouse Lumber."

This certainly proves beyond any question of doubt that the firms that are adequately represented in the telephone directory get additional opportunities to sell their wares not only to the

(Continued to page 90)





Build the "World's finest HOME" with—  
**ROBERT McNAIR**  
**RED CEDAR**  
**SHINGLES or SHAKES**  
**"OVER 400 DEALERS TO SERVE YOU"**

Government tests prove

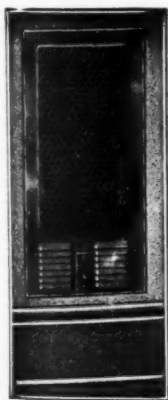
Endurance  
Insulation

Economy  
Health

ROBT. McNAIR  
SHINGLE CO.



VANCOUVER  
British Columbia



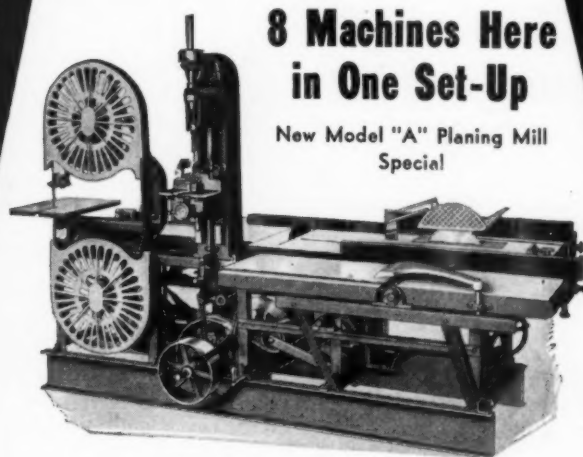
## ELECTRIC QUIKHETER

*Quick, Clean, Safe*  
**ECONOMICAL**

To add comfort and promote health by eliminating that chilly feeling in bathrooms, children's bedrooms, dressing rooms, etc. — on days when it doesn't pay to have the regular heating plant in operation — install the **FA** Quikheter, flush type. It furnishes quick, safe, clean, economical heat by taking *cool air from the floor* and moving it up through and out of the heating chamber with a *velocity* necessary to circulate the warmed air *throughout* the room.

Furnished in small sizes of 1000, 1250, and 1500 watts, and large sizes of 1500, 2000, and 3000 watts capacity.

**Frank Adam**  
**ELECTRIC COMPANY**  
**ST. LOUIS**



## 8 Machines Here in One Set-Up

New Model "A" Planing Mill  
Special

Each of the 8 machines in the Planing Mill Special is full-sized and independently operated. Durable, compact, low in operating cost, the new Model "A" does complete job from rough lumber to finest trim and finish. Equipped with high-grade ball bearings.

Send for catalog of individual and combination machines, priced as low as \$50.

**PARKS**  
 WOODWORKING MACHINES

Good Woodworking Machines Since 1887

**THE PARKS WOODWORKING MACHINE CO.**  
 DEPT. AB-1 1524 KNOWLTON ST. CINCINNATI, O.

## TRAIL-SMITH



*faster*  
**7-S**  
 and  
**10-S**

**Handy  
2-Wheel  
Trailer  
Mixer**

Write for  
bulletin.



Speed up your Concrete Jobs with a faster, streamlined Trail-Smith. Equipped with spring-mounted axle and new roller bearing automobile type wheels with oversize low pressure pneumatic tires. Automatic skip vibrator. Enclosed gear reduction. Vertical syphon type water tank. Roller bearings throughout. Move it fast—move it often.

**THE T. L. SMITH COMPANY**  
 2849 N. 32nd Street Milwaukee, Wis.

**SMITH MIXERS**  
 THE BOULDER DAM MIXERS



## Go Down-Your Profits Go Up!



### ... with a Speedmatic Saw

NOW, you can use the famous Speedmatic Saw two ways—As a portable hand saw . . . and on the radial arm—change from one to the other in less than a minute. This multiple-duty, flexible sawing tool adds dollars to your profit and cuts hours from your working time.

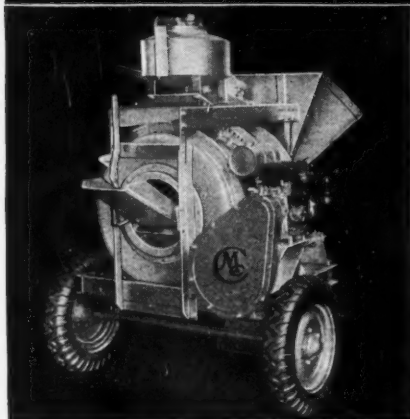
Hundreds of alert contractors find this Speedmatic the biggest profit builder they ever had on a job. Useful on wood, slate, marble, tile and composition material. Put it to work for you on your next job. Write right now for your Free copy of "Manual on the Use of the Electric Hand Saw in Building." It shows how contractors and builders are making money on every job. Write to

**The PORTER-CABLE MACHINE CO.**

1721-I N. SALINA ST.

SYRACUSE, N. Y.

## ANOTHER PROFIT MAKER



### LOOK!

Trim End Discharge design for easier handling and greater convenience.

Real roadability and maneuverability. Balloon Pneumatic Tires—Timken Bearings—Cantilever Springs. Disappearing Tongue.

Biggest production with low front, high back gated batch hopper. Up to 40 yards a day.

CMC proved double quick mix and remix action. Beats all competition in design—performance—high production.

And the PRICE will surprise you.

Whatever you need in a Mixer, we've got it—also Dual Prime Pumps, Hoists, Saw Rigs, Pneumatic Tired Carts and Barrows.

## The NEW C.M.C. 3½ End Discharger

It hits the "spot" with contractors and builders everywhere. Big Mixer efficiency with small Mixer speed and handling ease. The price makes it today's best buy in the 3½ Mixer field. Write.

**CONSTRUCTION MACHINERY COMPANY**  
WATERLOO, IOWA

(Continued from page 88)

people that are awarding government contracts but to everybody who is in the market for the products that these people have to sell.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY,

By Clarence B. Smythe, Trade Mark Service Mgr.

### Has Built 19 Low-Cost Houses

Norfolk, Va.

To the Editor:

I feel that I have gotten right much good from this magazine, and will probably continue to do so.

I have built nineteen houses costing from \$3,000 to \$3,500 during the past twelve months, and I have space on the tract that I am developing for twenty more, hence I am looking forward to getting some ideas of new designs.

R. O. TATE,  
Builder of Low-Cost Homes.

### Wants a Lot in House Plans

Tacoma, Wash.

To the Editor:

I subscribed for the *Builder* and asked for the book of plans for homes as your records will show. However I wish to register a heartfelt complaint which I hope will prove constructive and that you can do something about.

Book after book of plans like yours and others from all kinds of architectural services have the same basic faults from the standpoint of one like myself who develops lands and has to build or help clients build economical houses within their means of payment and suited to the actual climatic conditions. The architects apparently plan totally without knowledge of recent fundamental advances that modify the design. For this section of the country, and I will warrant for pretty nearly all the rest of the United States, it is desirable to have a fireplace and then turn it from a mere ornament (that practically all architects think it is apparently) into a heating unit to heat the house instead of the outdoors and chimney flue. The way to do this has been opened by the various types of steel circulating fireplaces of which I have already used three and found them so effective that in two cases the owners of the houses have done away with all other heating. But to do this the fireplaces have to be intelligently located on the inside wall of the living room, so that heat can be led out through ducts to halls, bedrooms, etc. If you have any intelligent architects on your staff, for the love of Mike, let them figure this out the way I am compelled to do. This together with a properly placed flue so that a circulating oil burner stove can be centrally located in the house (not in the living room) does away with furnaces, basements, and all kinds of expensive additions to a house up to seven or eight rooms, besides cutting heating expenses greatly.

That in turn changes the design of the house fundamentally and I am tired of trying to make over plans that were evidently based on making the exterior attractive primarily.

Next, the living room. At least 90% of all plans have light in the living room on two sides only; sometimes on one; so it is like a dark cave. Some have fireplaces nicely placed on the outside wall as far as possible from the main body of the house it is supposed to heat. Try and put it on an inside wall and you will find the doors will be on each side of the hearth, a most uncomfortable place to sit.

Finally, in spite of all the talk in the *Builder* about low priced houses, the plans instead of utilizing any of these ideas that would make a good inexpensive house simply show cheap inadequate shacks that would have no heating equipment and are too small to be good investments for resale. Let's have some plans that can be built for \$2500 or less, that have heating plants, light rooms, attractive inside finish, and at least two bedrooms.

A story and a half house is better in appearance than a cottage of one story often, so if you have anything that corresponds to these fundamentals, let's hear from you or from any other service you know of that have architects and practical builders on the staff and not free hand artists.

R. W. THOMPSON, President,  
Lakewood Lands Co.